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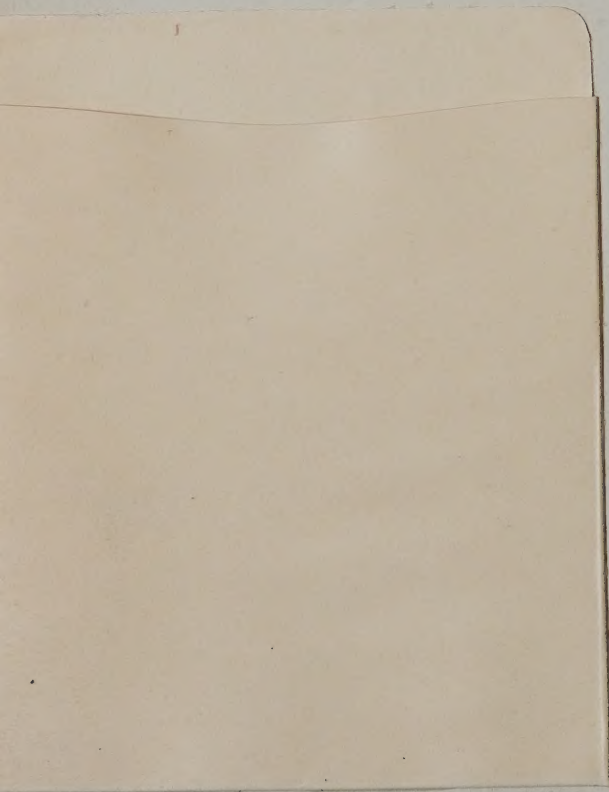
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THE  
ARCHITECT.

A WEEKLY  
ILLUSTRATED JOURNAL  
OF  
ART,  
CIVIL ENGINEERING,  
AND  
BUILDING.

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*"Architecture has its political use, public buildings being the ornament of a country: it establishes a nation, draws people and commerce, makes the people love their native country, which passion is the origin of all great actions in a commonwealth."*

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SIR CHRISTOPHER WREN.

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# THE ARCHITECT.

## A JOURNAL OF ART, CIVIL ENGINEERING, AND BUILDING

### GENTLEMANLIKE ART.



R. RUSKIN has laid it down, amongst other piquant principles of his, that "the artist ought to be a gentleman," and in these days there is something particularly attractive about the sentiment. But it must be remembered that this proposition, like all others, requires to be proved; and, to begin with,

if it be true that an artist ought to be a gentleman, then it must logically follow that there will be found in the practice of art certain elements which, in the hands of what is called a gentleman, come to be developed, not merely with a success of their own, but with such particular success as to constitute them almost a paramount consideration in criticism. Now, although we have here a question which no doubt admits of a great deal being said on both sides, especially if personal history is to be the test, yet, as we have hinted, it is probable at any rate that the sympathies of the best men at the present moment are quite in accord with Mr. RUSKIN's doctrine, if this can be properly defined.

The doctrine is that, other things being equal, the treatment of any artistic problem by a man of well-cultivated mind and manners, has in it something that commends the result to people generally who are themselves well-educated and well bred. In other words, culture is recognisable by culture, and the artistic work which is produced by a person of culture is therefore, in the eye of the critic—who ought always to be a person of culture—unmistakably superior to the work of one who is not possessed of that advantage. There is absolutely nothing pedantic about this; it is either plain common sense or error.

The simplest illustration of the principle ought, it would at first appear, to be derived from literature. The artistic element in literature is commonly to be identified with the peculiar and almost indescribable grace called *style*—a term which in this connection has a meaning somewhat different in effect from what the same word signifies in relation to productions, more or less finished, in other arts (for, of course, literature is, in this sense, one of the arts). In painting, for instance, or in music, or in architecture, what is called the style of the work is the style of the individual worker; unless when it is that of the work he has seen fit to imitate, which is another matter. But in letters there is a much more general quality, indeed one quite apart from individuality, which is called style in the mere sense that the writer knows how to write well; the writer who does not know how to write well being a writer who is said to have no style, or sometimes a bad style. Now here we certainly may discern the point before us. In almost every case, exceptions only proving the rule, this literary style is the simple result of a little culture, the refinement of the style being in a general way in proportion to the amount of the culture. If so, the question before us is whether in the productions of the painter or the sculptor, the architect or the ornamentalist, there is or is not to be discerned a similar contrast between the work of one who is a

person of well-cultivated mind and manners and the work of another who is not so. If cause and effect are equal quantities, as they are, this difference in cause must produce this difference in effect inevitably, and, in plain language, the art of the gentleman must so far of necessity be different from the art of the non-gentleman.

What, then, is the gentlemanlike element in art? It is a certain refinement, both of conception and of development, which, in art as in everyday conduct, possesses the charms of delicacy, courtesy, kindness, gentleness, subdued power, self-negation, and other forms of graciousness. It may be bold and strong, self-reliant enough and self-confident, courageous, and even defiant of that criticism which is censorious and of the meaner kind; but it will somehow avoid and escape always the charge of what is colloquially called bad taste. When, for example, we see a picture, no matter who painted it, which represents the shambles, we are justified in questioning whether the painter is a man of refined and gentle character; when we come across a school of painters whose *forte* seems to be the representation of naked bloodshed, we cannot but doubt the high humanity of the school at large; when we even are forced to admire the technical skill with which another school may portray the hardships and miseries of life without being able to glorify the presentment by a touch of that fellow-feeling which exalts man above the brute, and even the brute above the grass he browses on, we are still at liberty to lament the absence of the finer qualities of conception which in the same way elevate the more advanced races of mankind above the less. So also, to come to whatever province of fancy the reader may desire, however restricted, the question is one of full force and sound logic, whether the absence of refined feeling in the individual Englishman, be he only a colour decorator or a modeller of porcelain, does not manifest itself in his work, in contrast with the presence of refined feeling in his fellow-artist whose mental characteristics and opportunities of education have happily been of the better order.

Everybody knows what it is to look at the portrait of a gentleman painted by a gentleman; even when, as sometimes happens, it is deficient in certain bold and muscular qualities of portraiture, still the qualities of refinement and elegance will be discoverable, and one might almost say that the most plebeian subject acquires an air of high intellectual handling when really handled in the manner of a highly-cultivated mind. In sculpture the peculiar grace of a refined modeller is perhaps still more notable. In architecture no less, the design of such a subject as a church, in the hands of a well-educated and well-bred man, is quite a different thing from the same work produced by one who has risen from the ranks without rising above them. It is scarcely necessary to go on to say that in such arts as glass painting, metal work, decoration, carving, and so on, when of the higher order, the same distinction, being undeniably true in logic, is distinctly apparent in practice. Indeed, it is one of the most promising incidents in the present progress of artistic work at large in England, that men of good manners and refined thought are everywhere taking the place of precursors who in too many cases used to be inferior in all such respects. That is to say, the English artist is becoming more and more a gentleman, and his work is, we



say *consequently*, becoming better and better. If, indeed, such a result were not to be expected, in this as in many other things, where would be the inducement for self-culture and the study of refined thought?

There are some artists, however, who will be honestly loth to admit anything of this kind. All such refinement, they will tell us, carries with it a certain sacrifice of power. Nothing can be bought in this world without paying a price, and the price to be paid for gentleness of spirit is the sacrifice of vigour. The masculine and the feminine are two different intelligences, and the compromise of masculinity is the acceptance of femininity, and so on. But we need not deny this. Compared with the "noble savage," as he is produced in the Arabian desert, the Far-Western prairie, or the South African plain, the English scholar, or artist, or lawyer, or what not, may be called an effeminate person. Even the University undergraduate who reads is not able, as a rule, we may admit, to compete in athletics with the undergraduate who does not read. But this, we beg to say, is not the point; and to draw from such analogies the conclusion that an artist ought to cultivate Bohemian habits for the sake of freedom, or even brusque manners for the sake of force, is manifestly the way to a *reductio ad absurdum*. The cultivation of the higher intelligence and the more refined graces of human thought may, of course, like all other cultivation, be easily enough carried to excess; but in the maxim which is our text for the occasion, as the author of it would be one of the last men in the world to advocate the pursuit of the gentleman-like in art to the length of sacrificing its vigour, or to admit the necessity for purchasing mental delicacy at the price of a surrender of mental power, so would we equally decline to admit that there need be any price paid for the masculine grace we speak of, except the pains of acquiring it in its proper form. It has long been known that the best of the academical artists of our day have ceased to recognise the rough-and-ready conditions of artistic life which prevailed in England not so very long ago; in the constructive and ornamental arts we are glad to perceive that the same improvement is being carried out in the same spirit; and the conclusion we take leave to arrive at is that, in the whole field of English imaginative work, the national character is advancing on the same line, with the certain result of an increase of merit in every department; and an increase both of the profit and of the pleasure which equally attend upon the practice of genuine art for art's sake.

### A STUDY OF LIONARDO DA VINCI.

By W. WATKISS LLOYD.

THE two large volumes which have just appeared of the literary works of LIONARDO DA VINCI form a valuable contribution to our more intimate knowledge of one of the greatest of artists. It is well known how voluminous, miscellaneous, unarranged, difficult to decipher, and widely dispersed, are his manuscripts. LIONARDO wrote a small, peculiar hand, with uncertain orthography, and moreover he wrote backwards, from right to left. It is tantalising to turn over a manuscript volume by him and come upon one suggestive pen-and-ink sketch after another, of which the key is an illegible note. Dr. J. P. RICHTER, the compiler and editor of these volumes, admits the difficulty which he experienced in his task. The usual process of reversing the reversed, by reading the writing from the reflection in a mirror, was unsatisfactory and fatiguing; and the easier way was to acquire skill in reading from right to left. What is now published is but a selection from thousands of pages that are preserved in public and private collections in Italy, France, England, and other European countries; it has been made, not only with unstinted care and labour, but with much judgment, although in looking back to memoranda taken in a hurried inspection of a volume in the Ambrosian library at Milan, I am inclined to suspect that the copious materials which still remain unedited are of at least equal interest.

What is here given is worthy of warmest welcome, although one must wish that the materials provided had also been made the subject of a critical analysis and report. After all the pains that have been bestowed on compilation and arrangement, the very nature of the notes is confusing. LIONARDO seems to have set them down as they occurred to him, with the intention of some day reducing them to system.

Here and there we come upon systematic arrangement, but only to be succeeded by hints of disconnected detail which had been noted several times before. What we would have set forth would tend to answer the questions,—How much knowledge of science, art, and nature do the notes display? How far is such knowledge in advance or in arrear of the knowledge of DA VINCI's time? What do we gather that may express characteristics of the age and of the man? And, finally, are there any hints and insight for which we may be thankful?

Among the most interesting sets of memoranda are hints and studies for the great picture of *The Last Supper*. The picture itself, ruined and decayed, is now no longer a testimony to the genius of the painter. Yet thanks to copies, engravings, and drawings taken from it while its original glory was not utterly unimpaired, the world can still count the sentiment which it embodied among its most precious inheritances.

The notes we have here before us date in 1494-5, some three or four years before the painting was executed. They apparently comprise his earliest and crudest, and yet the truly germinative thoughts, of the project. We learn a lesson at the outset, that the very earliest notions which rise in the mind when first under the stimulus of a novel project, are likely to have a value that entitles them to careful recognition and record before they flee away. We find some ideas placed on record which were entirely rejected; others lived on and were cherished and developed; others were modified, transferred, recombined, but are still to be recognised as having vindicated their essential importance and pertinence through every change. It has been said that as we cross a mountainous ridge we have opportunities of seeing weather as it is making. There is the same strange interest in watching the dispersed and turbulent workings of the inventive faculty; in being admitted, as it were, into the laboratory of artistic and poetic reactions, and witnessing the transformations of merest dross into priceless ore that transcend any of the transmutations that the most enthusiastic alchemist ever dreamed of. It appears that LIONARDO was originally disposed to adhere to the traditional arrangement, according to which in so many pictures of *The Last Supper*, and not all of them earlier, the traitor JUDAS has a seat by himself on the nearer side of a table long enough to accommodate the rest of the apostles on the opposite side. Reproductions are given of two rough sketches carelessly thrown upon a piece of paper, which bears other small sketches and diagrams which in no way pertain to the same subject. In both these sketches LIONARDO has regard to the text: "He that dippeth his hand with Me in the dish, the same shall betray Me." In one, JUDAS tilts the stool on which he sits in front of the table as he reaches forward to place his hand in the dish; in the other he rises from his stool with a movement that indicates the same purpose. We have also a red chalk drawing, in which trial is made of another motive. JUDAS, still by himself on a stool in front, holds up his hand with the gesture of questioning, with allusion to the text: "Then JUDAS which betrayed Him answered and said, Master, is it I? He said unto him, Thou hast said." In the picture the gesture of questioning is made use of for another apostle. In this drawing the CHRIST already indicates an approach to the conception which was ultimately adopted, in the slightly inclined head and the right arm and open hand extended on the table, without reference to the dish. The beloved disciple on His left has thrown himself forward on the table, and is burying his face and hiding his distress with his interlocked arms. In one of the pen-and-ink sketches, JOHN has drooped down on the table to the front of JESUS, who rests His arm upon him as if with a spontaneous caress of comfort. The management of the figure of JOHN, in regard to his position as described in the gospel, was a problem of constant difficulty to the painters, and some of the solutions presented, however reverent, are doubtless grotesque enough. LIONARDO renounced both the ideas which are here left on record, for another in absolute contrast, which gave a more touching exhibition of grief, and had the further advantage of allowing the principal figure the fullest dignity of isolation.

When we have an opportunity of following the successive changes through which order and harmony are educed out of confusion and contradiction, as the artistic mind extricates itself out of one false scheme after another, and secures at last an expression of its central thought which can be rested in as satisfactory, we seem to understand the suggestion of the theory of PLATO, that our best knowledge is reminiscence, and that



our endeavour to learn is but a struggle to recollect. The processes of LIONARDO may be confirmed by a noteworthy parallel. Several experimental sketches of TITIAN are preserved for his *Peter Martyr*, the great picture which was burnt at Venice, and in the memory of which those of us who have seen it have an advantage which younger men may envy. The sketches show that the master had early decided upon his composition in all respects but one; yet that one was the most important of all. The saint was prostrate on the ground, his murderer standing over him, who pulls his robe roughly aside to make passage for the fatal stroke. The glimpse of the escort in full flight through the wood behind, and the figure of the flying and wounded monk in front, lend pathos to the desertion of the victim. The movement of his lifted arm seems naturally directed to avert the blow. In the picture as completed it is lifted still, but with a substituted motive. It does not grasp, or attempt to grasp, that of the felon; it is extended, as if greeting, towards the palm-bearing cherubs that appear above in an outburst of light from heaven; the revelation of the glorious symbols of martyrdom has possession of his soul even at the crisis of the yet uncompleted sacrifice. And yet the direction of the look of PETER, and the pose of the head that admits of it, which are so essential to the sentiment and might seem to have governed the entire design, were the very latest decisions of the painter. The sketches show the several trials of the head in various positions, which would not have admitted of this effect.

It is probable that few artists have been without the occasional experience of feeling as if possessed with an idea which haunts them and eludes them, which is sometimes half seen, half seized, and then is lost again, until perseverance is justified by ability to fix it in a form which has little enough resemblance to many an intermediate guess, but which yet seems to have been existent though latent all along. The written notes of LIONARDO convey the same impression as his sketches—of an artist who has a general conception in his mind which involves what is most important of all, a sense of the characteristic sentiment, the special pathos which he would realise, and beyond this an instinctive appreciation of the fund of expressive materials at his command. As we read his notes we are reminded of one of those curiosities of draughtsmanship that SHAKESPEARE is fond of referring to under the title of “perspectives”—masses of disarrangement apparently, but which still convey an impression of obscure method and purpose, though this is only brought into correct and self-explained adjustment when the eye is placed at the true point of view. Then what seemed to have the nearest approach to meaning loses it entirely or blends away into another; and what seemed utterly desperate of connection proves a centre of vital expression.

Among the notes we read, thanks to the helpful interpretation of Mr. RICHTER: “One who was drinking and has left the glass in its position, turns his head towards the speaker.” This thought was only written down to be dismissed; it appears no more, either in the sketches or the picture. It is different with the next: “Another, twisting the fingers of his hands together, turns with stern brows to his companion.” We have here an example, which is not without its value, of the toning down in final execution of the rude vigour of an original conception. In the picture JOHN clasps his hands before him, his fingers have flown together and interlaced at the sad and sudden words just spoken; but he is not twisting his fingers, he is not wringing his hands, and so far is he from turning to a companion with stern brows, that he has sunk into himself with deep depression and downcast eyes.

“Another with his hands spread open shows the palms and shrugs his shoulders up towards his ears, making a mouth of astonishment.” Here again has the painter, when he came to stand before the actual wall of the refectory that was to receive his picture, known how “in the very tempest, torrent, and it may be said whirlwind of his passion to acquire and beget a temperance to give it smoothness.” The third apostle to the left in the final composition exhibits the exposed palms; but instead of the shrug of the shoulders we have the hands elevated, and the mouth, however expressive, is not open with astonishment. In the instruction of HAMLET to the players, just quoted, he does not disallow the naturalness of passion breaking wildly forth; in fact, he assumes such fundamental violence as the proper basis of expression. The students of the Dramatic College may have worse advice than to adopt the implied hint of the Danish prince, and to commence the study of a part by

allowing themselves as they recite the speeches to give way with full license of extravagance to whatever movements, gestures, and expressions of countenance the words spontaneously suggest. It is thus that invention is stimulated, thus that it develops instinctively; it will be time enough afterwards, and then the time must be seized, to moderate these outward signs; the nature that is so artfully veiled will still assert itself, even as the limb which the sculptor models as nude contributes to his effect when he has invested it with drapery. Manifestations of passion and pathos are exaggerated even to grotesqueness in the arena of Padua and the pulpit of Pisa; but several of the most overwrought instances are found to be the true precedents in direct line of descent of some of the most subdued and refined embodiments of feeling by the later masters, who knew best the artistic value of self-restraint. The comparison of the notes and sketches of LIONARDO DA VINCI with what we know of his finished work, represents the entire course of such a history of successive epochs of art as proceeding in a single mind.

“Another speaks into his neighbour’s ear, and he, as he listens to him, turns toward him to lend an ear, while he holds a knife in one hand, and in the other the loaf, half cut through by the knife.” This incident was judiciously modified in the picture. That the listener should be suspended, in his action of cutting the bread, by a question from another apostle, would manifestly imply an inconsistent amount of inattention to the startling announcement of JESUS. The recently cut bread is omitted, and the knife is transferred to the speaker—to PETER, in fact—and he, in agreement with the gospel text, is inviting the attention of JOHN, who is too overcome by his own thoughts to immediately attend to him.

“Another who has turned, holding a knife in his hand, upsets with that hand a glass on the table.” There is no second figure holding a knife in the picture, and it is JUDAS who upsets not a glass but a vessel with the salt.

“Another lays his hand on the table, and is looking.” This corresponds with the figure of the apostle on the extreme left of the picture, who stands up at the end of the table, and leans forward as he rests both hands upon it. In the pen-and-ink sketch a figure at the other extremity advances to the table, and places one hand upon it. “Another leans forward to see the speaker (that is, JESUS), and shading his eyes with his hand; another blows his mouth full (*soffia nel boccone*).” Both these suggestions were rejected, and do not reappear either in sketches or picture in the faintest trace. “Another draws back behind the man who leans forward, and sees the speaker between the wall and the man who is leaning.” The motives intimated in this note are curiously resolved and recomposed in the picture. The happy imagination of the contrasted action of leaning back is preserved in the movement of JUDAS, but he is in front instead of behind PETER, who leans forward and looks between him and JOHN in the direction of JESUS.

Finally, in the red chalk drawing we have the gesture which reappears in the picture of an apostle looking in one direction, while he refers to JESUS with a reverted thumb in the other; and in a pair of figures, one slightly leaning back, and one with a single arm extended and expanded palm, which became the beautifully-composed pair of apostles in the group immediately on the left of the SAVIOUR.

## LIABILITY OF AN ARCHITECT FOR TRESPASS.

BY A BARRISTER.

A DECISION was given recently in the Irish Court of Appeal, which illustrates the risks to which an architect may unknowingly expose himself in the ordinary discharge of his professional duties. A contractor employed by a Drainage Board, with the object of carrying out his contract, and by direction of the engineer to the Board, entered upon certain lands, the purchase of which had not been formally completed. The owner sued the engineer for damages for trespass. It was argued that the engineer, being merely employed by the Board to superintend the works, was not liable; but the Court of Appeal have held, reversing the decision of the court below, that the engineer was liable in damages for trespass, on the ground that all persons accessory to the commission of a tort are responsible in damages.

It is curious that the owner should have selected the engineer



as defendant when the contractor and the Board which employed them both were apparently the parties more immediately concerned; but there can be no doubt as to the rule of law with regard to what are termed wrong-doers and their responsibility. Whoever wilfully assists in doing an unlawful act becomes answerable for all the consequences of such act; and when several persons have been jointly concerned in the commission of a wrongful act, they may in general all be charged jointly as principals, or the plaintiff may sue any of the parties upon whom individually a separate trespass attaches. In the case of master and servant, the servant is equally liable with the master in respect of his own personal participation in a wrongful act, and cannot discharge himself from liability on the ground that he acted under unavoidable ignorance, and in obedience to his master's orders; nor can he justify under any authority from his master when his master had no authority in the matter, although the master may himself be made responsible for the act of the servant.

It is often a difficult task to determine the extent of the responsibility of a principal for the negligent or wrongful act of his agent; but, independently of the original authority of the agent to commit the act complained of, the principal may become liable by subsequently ratifying the act of his agent, and thus making it his own act.

"He that receiveth a trespasser, and agrees to a trespass after it is done, is no trespasser," observes Lord COKE, "unless the trespass was done to his use or for his benefit, and then his agreement amounteth to a precedent commandment." But this is a question of too great nicety for present consideration. It will be perhaps useful, nevertheless, to draw attention to cases such as frequently arise where an architect, jointly with his employer or individually, may be made responsible for a wrongful act.

The general rule is that the person injured by the act of another cannot go beyond the person who actually did the injury, unless he can establish that the injury was the inevitable result of some specific order given by the employer. There are two classes of cases. The first, where the act is done under the order of the employer, and the order cannot be obeyed without doing what is complained of. The second, where the improper mode of doing what might be rightly done occasions the mischief. Endeavours have been made to hold all parties liable from whom the act ultimately originates; but it has been held that, if the act ordered to be done can be lawfully done without injury to others, the act of the person personally engaged in doing the mischief is not the act of the person who sets him in motion, unless the relationship of master and servant can be established between them. For example, where the plaintiff and defendant were owners of adjoining ancient houses, and an architect employed by the defendant to superintend the repairs of his house having considered it necessary to pull down and rebuild the front wall, agreed with a contractor to do the work for an estimated price, and the workmen of the contractor, in pulling down the wall, removed a breast-summit which was inserted in the party wall between the defendant's and the plaintiff's house, without taking any precautions, by shoring or otherwise, in consequence of which the front wall of the plaintiff's house fell, it was held that there was no evidence for the jury of any liability on the part of the defendant, the owner of the property. It was not sought in this case to make the architect liable, although if the architect had personally superintended the work he might have been made so. The act here was a lawful act, but was performed in a negligent and improper manner.

Where the act is in itself a nuisance, the party who employs another to do it is responsible for all the consequences; but where the mischief arises not from the act itself, but from the improper mode in which it is done, the person who ordered it is not responsible, unless, as we have already seen, the relations of master and servant exist. In further illustration of this principle, a firm of contractors who were the defendants in the action, entered into a contract to pave certain portions of the parish of St. Pancras. They then entered into a sub-contract with one WARREN to pave a particular street, the materials being supplied by the defendant contractor and brought to the spot in his carts. The stones were so placed on the pathway by the men employed by WARREN as to obstruct the same, and the plaintiff fell over them and was injured. Mr. Justice MAULE held that the sub-contractor and not the person with whom he contracted was liable. "I do not mean to say," he remarked, "that in no case

can a contractor be liable for the negligence of his sub-contractor; but I say that the simple fact of his filling that position does not make him liable. I apprehend that if the defendants had been present and directed or sanctioned the doing of the act complained of, they would have been responsible for it. But here they are sought to be charged simply on the ground that they had contracted with the parish authorities to do the work, in the performance of which by their sub-contractor the negligence happened which has given rise to the plaintiff's misfortune."

In another case where work was done for a railway company under a contract, it was held that the company were not responsible for injury resulting to a third person from the negligent manner of doing the work, though they employed their own surveyor to superintend it and direct *what* shall be done, but not the manner of doing it.

But where the contractor is employed to do an act which is in itself unlawful, in such case the employer is responsible for the wrong so done by the contractor or his servants, and is liable to third persons who sustain damage from the doing of that wrong. "If the contractor does the thing which he is employed to do, the employer is as responsible for that thing as if he did it himself;" as, for example, where a man employs a contractor to build a house, who builds it so as to darken another person's windows, the employer is responsible for the injury.

These illustrations are sufficient to show that an architect may render himself liable in damages for an act which is legally wrongful but for which his employer is actually responsible. In all cases where the architect has reason to anticipate any difficulties of this kind he should, before taking any steps which may involve him in expensive litigation, obtain an indemnity from his employer, and thus protect himself by throwing the burden on the shoulders of those under whose sanction and authority he acts.

## THE ENGINEERING EXHIBITION.

THE Agricultural Hall is once again being utilised as a field for the display of industrial products, and on Thursday an important exhibition, styled the Engineering and Metal Trades Exhibition, was opened to the public, and will remain open till the 21st of this month. The exhibition, as far as can be judged of at present, is likely to prove a success, and fairly representative of the industries the promoters have aimed at illustrating. Leading firms have responded cordially to the invitation of the promoters, and altogether nearly five hundred firms are represented.

We will begin our description of the exhibits with a notice of Messrs. W. H. LINDSAY & Co.'s (Paddington Works) specialities, among which we shall first speak of the patent bridge decking, of which a model is offered for inspection. Several advantages are obtained by the patent trough floor over and above those possessed by other known floors for bridges for railways, roads, &c. Models and sections of the patent are shown. A good article can always be got by paying a price, but in the present days of competition this is not enough; for purchasers, if they lay out their money in proper quarters, may obtain the very best products of manufacture at very low prices. In the patent floor this question of cost has evidently been met. Technically, the improvements claimed for the flooring consist in utilising rolled sections of splayed channel iron, so that the top table shall be thicker than the sides, in order to approach the theory of the girder principle as much as possible, by which means the metal is taken away from the web and added to the flanges, thus increasing the sectional strength of the trough and producing a greater amount of resistance over a floor which is composed of an uniform thickness of plate, without increasing the weight of iron to the square foot of area to be covered. Then the cost of manufacture is reduced to a minimum by rivetting the trade-rolled sections together with a single row of rivets, at such a point in the section where the strain is almost neutral. The floor can therefore be offered at prices by which engineers and contractors can at once satisfy themselves, and frame their estimates according to the current girder rates per ton, so that the floor can be manufactured for 10*l.* 15*s.* per ton, supposing that to be the rate for the manufacture of bridge girder work. The flooring, besides being adapted for supporting railway or road traffic, may also be used for floors of warehouses, where they become fireproof



when the troughs are filled with concrete. Smaller sections make efficient water-tight roofs, as also bankers' and other strong room floors where security for property is required. The strength of the floor is considerable; each trough may be treated as a girder, but each girder is connected to its fellow, so that when weight is applied on one trough it cannot deflect without the assistance of the adjoining troughs for some distance from the point of weight. They have been the subject of careful design and investigation, by which the moment of resistance in inch tons has been determined, so that engineers and contractors will have no difficulty in deciding on the particular trough required, from the sections shown together with the furnished data.

We will next mention the patent wrought-iron sashes with wrought bosses, which have been designed for special adaptation for warehouses, schools, and public buildings. The bosses serve to form a firm joint at the intersection of the bars; they are small, do not obscure the light appreciably, and are not unsightly. The bars and bosses are of malleable wrought-iron, light in appearance, and durable. The sashes can be made at short notice at the price of common cast-iron sashes, as ordinary warehouse and school sashes, or as close bar sashes, (obviating the use of window guards,) gable windows, of circular form and varied pattern, &c. A speciality of a different kind will be found in the Lindsay's improved patent reversible treads and landings, suitable to any sort of staircase, and designed as an improvement on the well-known wooden block construction. Its speciality is that the wooden blocks in each tread can be removed and transposed so many times that it is almost indestructible besides being noiseless. In hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, so as not to leave any cracks, and so that the treads or landings can be swept or washed clean; also, if it be necessary to get light under a staircase or landing, rough glass blocks can be fitted in the iron frames, side by side with the wood, and a subdued light thus obtained. Each tread is so constructed that the wooden blocks can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn the blocks can be taken from the front, and those next the riser substituted. The worn blocks, after being reversed, are slid into the position next the riser. When the nosing blocks in turn become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all have been utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. It has already been adopted by some of the leading architects and engineers with satisfactory results, as has been testified by able professional men. Oak, elm, or teak is generally used in these treads, but, if an exceptionally durable staircase is required, "jarrah," an Australian mahogany of extreme hardness, is employed.

Samples of rolled iron joists are also shown. Some very beautiful specimens of Mediæval ironwork and art metal-work, produced at the works of Messrs. LINDSAY & CO., 14 Wharf Road, Paddington, will be noticed on a future occasion, when a further description of the various exhibits will be given.

### PARIS NOTES.

EACH year the City of Paris appropriates a number of patches or strips of ground required for the widening and straightening of public thoroughfares. From statistics just published it appears that during the first five months of the present year appropriations of this kind were made in eighteen arrondissements. The offers of the municipal authorities for the land thus taken came to 651,615 frs. 90 c., while the jury specially appointed to adjudicate on such cases awarded a total of 776,135 frs. 40 c., or about 20 per cent. more than the offers of the City. The most salient point, however, about the figures is the tremendous and ever-increasing value of land in the centre of Paris, to which they bear witness. Thus in the 2nd Arrondissement the City had to pay from 1,100 frs. to 2,500 frs. per square mètre; in the 8th and 10th Arrondissements from 360 frs. to 650 frs.; in the 15th from 50 frs. to 200 frs.; in the 18th 150 frs. to 370 frs., &c. In the outlying districts the cost was, of course, very much less, ranging from

20 frs. to 70 frs., but the first-named figure of 100l. per square mètre must fully equal, if it does not surpass, the selling value of ground in even the dearest parts of the city of London.

The question of abolishing the existing Paris *enceinte* does not seem to make much progress towards solution, notwithstanding the many committees—parliamentary, municipal, military, technical, and private—that have been appointed to study it. General Thibaudin and the War Office continue steadily to oppose all projects tending to suppress or to impair the military advantages of the Zone, while the expense stands in the way of the execution of the various plans propounded for re-establishing the Zone further out in the country. If this difficulty of cost could be surmounted, it is probable that General de Villenoisy's scheme would stand the best chance of being adopted. It proposes to throw the *enceinte* and space cleared for octroi and defensive purposes as far back as the line of the old forts, and Paris would thus be made to include not only the space lying between the existing wall and the Seine from Billancourt to St.-Ouen, but also Vanves, Montrouge, Gentilly, Charenton, Saint-Mandé, Romainville, and Pantin. This would really be the best possible solution of the matter, for the French capital is certainly somewhat stifled within its existing boundaries.

A rather amusing passage of arms has lately taken place between the Government and the Paris Municipality. With a view to excluding M. Oustry, the Prefect of the Seine, from the new Hôtel de Ville, the Council-General of the Department, which is practically identical with the Municipal Council, requested the administration to negotiate with the State for a lease of the Pavillon de Flore, in order to locate there all the services of the Préfecture, with the exception of those having an exclusively municipal character. As a reply to these overtures, the Government has published a decree in the *Journal Officiel*, whereby all those portions of the Louvre and the Tuileries occupied provisionally since the Commune by the City of Paris' services are to be handed over to the authorities of the National Museum, and prepared for the reception of works of art. The Pavillon de Flore being included in this definition, the design of the Council is entirely frustrated, and M. Oustry will be able, in spite of all opposition, to take possession of the apartments that had been regularly assigned to him in the Hôtel de Ville by former decisions of the Council itself, before the radical element in that body became as paramount as it now is. It may be remarked that the municipal papers and effects are already in process of removal from the Pavillon de Flore to their new quarters, upwards of fifty tons of documents, &c., having been transferred daily during the past week.

The inhabitants of the Quai d'Orsay quarter and many other influential persons have presented a petition to M. Jules Ferry, the Premier and Minister of Fine Arts, with a view to obtain the rebuilding of the Palais de la Cour des Comptes, burnt during the Commune. The question would appear to present many difficulties, for the Administration has already considered several schemes for utilising these ruins, and has been able to arrive at no decision. Plans and estimates for rebuilding the palace and turning it into a great fine arts museum were, in fact, made out some time ago by the Government architects. It was found, however, that, even if the greatest possible use were made of the solid parts left standing, the reconstruction of this vast building and the work of fitting it up as a museum would cost at least 14,000,000 frs. (including the value of the ground), and the Government not being willing to undertake such an expense, the scheme appears to have been definitively abandoned by the official mind. There is nothing, however, to preclude the Société des Arts Décoratifs from applying the proceeds of their gigantic lottery, which is expected to yield upwards of half a million sterling, to carrying out the above-mentioned design, and so turn the ruins into a French South Kensington. Such, indeed, may very possibly be the solution of the problem.

A delegation of the Industrial Art Inquiry Commission, consisting of MM. Teisserenc de Bort, Tolain, Guillaume, Cernesson, Spuller, and Antonin Proust, had an interview on Saturday last with M. Jules Ferry, for the purpose of explaining to him the conclusions that the Commission purposes embodying in its report. This document will recommend the development of instruction in drawing and design, an increase in the number of schools of manual apprenticeship, the founding of industrial art schools at a cost of 5,000,000 frs., and an improved organisation of the body of technical professors.

The Prime Minister expressed himself as prepared to second the recommendations of the Commission, and authorised the



delegation to call a meeting of that body and report his opinions to it.

The Association of French Artists has opened a competition for the design of a new Salon medal to be given to prize winners in future exhibitions, and to mark the new departure taken by the society since its recognition by the State as an institution of public utility. Any member of the association can compete, and must execute a plaster model of the face of the medal, which is not to exceed 10 inches in diameter. Artists are free to choose their own composition, with the one condition that the finished design recalls in some way or other all the arts that are represented in the Salon exhibitions. The models must be sent into the Palais de l'Industrie on or before July 25, and will be exhibited on the 27th, 28th, and 29th of same month. The jury will consist of the members of the sub-committee charged with the administration of the society, presided over by M. Bailly, the president. Three prizes will be awarded of 1,500, 1,000 and 800 frs. respectively, and the lucky artist whose model is chosen for definitive execution will receive the sum of 12,000 frs.

M. Idrac has secured the execution of the bronze statue of Etienne Marcel, to be erected facing the Hôtel de Ville, for which he will receive 40,000 frs., in addition to the cost of the material and casting. Of the other two competitors in the second round, M. Fremiet was classed second with a prize of 5,000 frs., and M. Marqueste third with 4,000 frs. The statue itself is to be 15 feet in height, and M. Idrac has the right of choosing his own artist for the execution of the pedestal.

The following awards were made by the Congress of Architects, whose annual meeting has been lately held in Paris: 1. Private Architecture—Silver medals to Messrs. E. Damville and Léon Lenoir. 2. The French School at Athens—Bronze medals to Messrs. Portier and Remach. 3. National School of Fine Arts—Silver medal to M. Jean Mincou. 4. School of Decorative Art—Silver medal to M. Marcel Rouillard. 5. Private Schools of Architecture—Silver medal to M. Louis Poncet. 6. Municipal School of Apprentices—Silver medal to M. Charles Leroux, and bronze medal to M. F. Descroix.

## MEMORIAL TO LADY MILDRED BERESFORD-HOPE.

A MEMORIAL altar has lately been dedicated in the church of St. Augustine, Canterbury. The altar is in the Under Chapel, and has been erected by Mr. Beresford-Hope as a memorial of his wife, Lady Mildred, and of the seven first archbishops, whose remains lay buried in the abbey, and whose shrines were arranged under the arches of the apse around the high altar; and of St. Ethelbert, Abbot Adrian, St. Mildred, and Queen Bertha, who was never canonised. The chapel is beneath the Guesten Chapel, which is to the south of the Guesten Hall, now used as the college dining-hall. The Under Chapel was long known as the Crypt, and is somewhat similar to that of the Guesten Chapel at Ely, known as Crauden's Chapel, which adjoins the Prior's Hall. It was made a memorial chapel to past students by Warden Bailey, and on its walls are inscribed the names of the deceased students and of the first warden, Bishop Coleridge, of Barbadoes. There are also groups of sculpture designed by Mr. Burges. The new altar is made of oak, and its framing is inlaid with various designs in coloured woods, with the following words over the four panels below: "Exultabunt sancti in gloria laetabuntur in cubilibus suis." The panels have in them figures of St. Mildred, St. Ethelbert, St. Augustine, and Queen Bertha, designed by Clayton, and executed in aluminium repoussé on red and green enamel grounds, diapered with gold, and set in niches of yellow bronze. The mensa is of dark fossil Derbyshire marble and the footpace of Shap granite. The super altar is of dark Derbyshire marble, and on it stand the altar cross, vases, and candlesticks. The design of the first is partly based on a small cross of ancient workmanship in Mr. Beresford-Hope's possession. The new cross is made of bronze and copper gilt, with enamel pictures of the evangelistic symbols at its terminations, and contains a smaller cross of green rock emerald. The cross is supported by a shaft of Derbyshire spar, and by a circular base of bronze. The candlesticks and vases are of corresponding design and material. A memorial cross has also been given by Mr. Beresford-Hope to the altar of the Upper Chapel. It is a tall and slender one of silver with an enamelled *Agnus Dei* in the centre, the terminations being ornamented with cornelians and carbuncles. Its arched base is richly treated, and is of yellow bronze open in the centre, so as to allow the inlaid marble cross of the reredos to be seen through it. The memorials have been designed by Mr. R. Herbert Carpenter, the metal and enamel work

have been carried out by Messrs. Barkinton & Krall, the marble and granite work by Mr. Forsyth, and the oak and inlaid work by Mr. Beresford-Hope's workmen, under Mr. Josephs, at Bedgebury.

## MAGDALENE BRIDGE, OXFORD.

THE annual meeting of the Association of Municipal and Sanitary Engineers was held at Oxford on the 28th ult. and two following days. Mr. W. H. White, C.E., the President of the Association, delivered the opening address, in the course of which he gave a description of several of the local works. The following reference was made to the Magdalene Bridge. The bridge, 164 yards in length, crosses the two branches of the river Cherwell and a meadow between them. It is the only means of communication between the city of Oxford and the eastern suburbs, containing about 9,000 inhabitants, and it also leads to the two main roads to London. The bridge, the erection of which dates 110 years back, is a stone structure of elaborate elevation. It has six semicircular river arches, four semicircular, and one three-centred land arch. The bridge is narrow in proportion to its length, the carriageway being 18 feet and the footways respectively 4 feet 9 inches and 3 feet 9 inches wide. It has of late years been notoriously insufficient for the traffic, and the Local Board has long contemplated widening it. There were also fears of its stability, owing to settlements which had cracked and bulged the masonry, and as far back as 1878 it was thought prudent to stop the cracks with cement concrete, and to put in cramps and tie-rods. The advent of tramways a year or two back caused the Board to decide upon widening the bridge without further delay, and the Tramway Company was "persuaded" to contribute 2,000*l.* towards the work, on account of the further hindrance to traffic which it was seen would be caused by a double line of tramway being worked on the existing 18-feet carriageway. It will, perhaps, be in the recollection of some of the members present what a storm of indignation was aroused by the proposal to interfere with the bridge. Articles appeared in the London papers, meetings were held, and influentially signed petitions sent in, all with one accord protesting against what they were pleased to call "the destruction of an ancient monument," and asserting that the bridge was wide enough for all requirements; but the Board, with pardonable obstinacy, persisted in thinking that those on the spot were the best judges of the necessity of the work. It was accordingly begun in April 1882, and is now well on its way to completion; and I trust it will ultimately be admitted by the objectors that, so far from an act of vandalism having been perpetrated, a work of much public utility has been done without detracting from the picturesque character of the bridge and its surroundings. The extension is on the south-west side, and is 20 feet in width. By this addition the bridge will have a 32 feet 6 inch carriage-way, and two 7 feet footways. The tramway lines will be removed to the centre of the widened road. The elevation of the new part will be a reproduction of the old elevation. The preliminary borings having shown the presence of running sand under nearly the whole of the site, it was determined to pile down to the Oxford clay, which is at a depth of about 18 feet below the surface of the meadow. The bearing piles are of English elm, with cast-iron shoes, secured by strong wrought-iron straps. The piles under the river abutments are 11 inches square and 14 feet long, and under the land abutments and walls 9 inches square and 18 feet long. They were driven by a Lacour's steam pile-driver, and penetrate 2 or 3 feet into the clay. The piles—380 in all—are placed about 4 feet apart from centre to centre, and the weight they sustain averages about 12½ tons per pile, or 400 lbs. per square inch of section. The cost of the piles, including shoes, rings, driving, and cutting off level, was—11 inches, 43*s.* each; 9 inches, 38*s.* 6*d.* Elm sleepers, 6 inches thick, were spiked down to heads of piles. One set of river foundations was completed at one time. Dams were in each case thrown entirely across above and below the bridge, and a temporary cut was made from one branch of the river to the other, to facilitate the passage of the water. Four pier and abutment foundations were thus in hand at once. Each one was surrounded with 9-inch by 3-inch elm sheet piling, 9 feet long, shod, and driven as before described. The cost of the sheet piles, driven and cut off, was 10*s.* 6*d.* each. The ground was excavated one foot below the heads of the bearing piles, and the spaces were filled in with cement concrete, which was carried up to the level of the top of the sleepers, at which height the masonry commenced. The piers and abutments were faced 18 inches thick, and bonded with "through" courses in Stanworth stone (a millstone grit, quarried near Blackburn), set in cement, the filling being of cement concrete. The course from which the arches spring is 2 feet high, and is formed of single stones going through the whole thickness of the piers. The old foundations were discovered to be two thicknesses of 6-inch elm planking, laid a little below the river bed, without any bearing piles. These foundations had settled so irregularly that the piers and abutments were much out of level. As the Thames Valley Drainage Commissioners intend shortly to deepen



the river considerably below the old foundations, it was thought advisable to take this opportunity of securing them. Skewbacks were cut under the old work, and inverted arches of 18-inch brickwork in cement with a versed sine of 3 feet 6 inches, were put in from pier to pier. The river bed between the new piers was also covered with a foot of cement concrete, in order to prevent the heads of the piles being exposed if the river bed should be scoured out at this point after its level has been permanently lowered, and the work was finished by a sheeting of 3-inch elm piles driven across the river above and below the bridge, and tied into the brickwork and concrete. This work was, in the south-east branch of the river, made difficult and risky by the great pressure of water outside the dam, increased by high floods. Springs kept boiling up at all points, and had to be constantly watched and dealt with, as they caused movements of the sand. The work was pushed on night and day, and was finished without mishap, except the slightest possible settlement of one abutment. Under the abutments of the land arches and side walls the foundation is of lias concrete from a foot below to two feet above heads of piles. The ashlar in the side walls and pillars is of oolitic limestone from the Taynton quarries in this county. The land abutments and arch-voussoirs are partly of Taynton and partly of Stanworth stone. The backing of the walls is of a tough limestone from a quarry on the sewage farm in the Coralline Oolite formation, and the abutment backing is of concrete. The whole of this masonry is set in lias mortar. A straight joint is made between the new and old work, and the only ties are wrought-iron "lewis" bolts, "lewised" into the old arch stones and turned down and cemented into the new ones. The parapets are of Taynton stone set in cement, and the several members are secured together vertically by slate "dowels," and horizontally by cement "joggles," no metal ties or cramps being used. The arch spandrels are filled with lias concrete, and a ring of that material is carried round the large arches. It has been found necessary to cut away a large quantity of the old masonry and put in new stone, some of the old arch stones in particular having perished to a dangerous extent. It is intended to pitch the carriage-way with 5-inch setts upon 4½ inches of cement concrete, and the footways will be of 2½ inch York flagging, with 12-inch by 6-inch curb of Stanworth stone. A travelling five-ton steam crane has been constantly at work taking away the excavated soil, depositing the filling, drawing piles, and conveying from point to point all materials and appliances required. The works have, therefore, made rapid progress, with a minimum of hand labour. The contractor is Mr. George Moss, of Liverpool, to whom great credit is due for promptitude and skill. The cost of the work, including the underpinning of the old bridge (paid for by the Thames Valley Drainage Commissioners), but exclusive of land purchases, compensations, and establishment expenses, will be about 10,600*l*.

### WORCESTER ARCHITECTURAL SOCIETY.

THE first excursion of the year by the Worcestershire Architectural and Archaeological Society has been made to the Golden Valley, Herefordshire. The first spot visited was Dorstone Church, which was described by the Rev. Thomas Powell, rector. The present building was repaired and modernised in 1829, and only two relics of the old structure have been preserved in the walls of the present building, which consists simply of nave and chancel. There is an historical interest as to the church that was demolished, as it is recorded that Ricardo de Brito, one of the murderers of Thomas à Becket, sought an asylum here, and built a chapel as an atonement for his crime, which was dedicated by him *ex voto* to St. Faith, A.D. 1271. There are numerous monumental tablets in the church, and one of them records five Thomas Prossers, who were all in succession incumbents of Dorstone over a period of 200 years.

On leaving the church the next object of observation was a pre-historic stone monument or cromlech, called Arthur's Stone, on an eminence about 700 yards above the valley. This Mr. Powell described to have been an altar stone on which the Druids had made sacrifices, and there had been a resident priest, for relics of former fires had been discovered. The long flat stone, or altar, is 19 feet 2 inches long, and its greatest width 11 feet 7 inches. It is of the old red sandstone of the vicinity, and it was supported by many upright props of granite, of which only eight remain upright, the rest being sunk in the soil. There was formerly a further length of flat stone supported by a pillar, but this was broken up fifty years ago to repair the roads. Mr. J. S. Haywood read a paper stating that King Arthur, famed for his round table, had no connection with this ancient stone monument, which was centuries older than his time, and ought to be called Thorstein, as having been dedicated to Thor, the northern heathen god of thunder.

On descending to Dorstone an ancient monolith of granite was noticed standing on a pediment, and now surmounted by a wooden dial, once a cross in Catholic times, and a Celtic relic in heathen days. It is probable that the monolith was really a hoar-stone, so called by the Saxons, of which so many yet remain with corrupted

names in the country, and this by the vulgar consonanting process became Dorstone. The Cistercian monks who came here and founded Abbey Dore punned upon the name, for *or* in heraldry represents gold, so the monks latinised the name to *Vallis aurea*, the golden valley. But to render this appellation understood by the common people, a legend was invented—for every monastery had some wonderment—and it was said that in a certain part of the river Dore a fish had been taken having a golden chain round its body, showing that this was a sacred place, and thus the Golden Valley took its name. Mr. Haywood exhibited an engraving taken from a picture by W. O. Sadler, in which two monks are represented with rod and line capturing this fish environed with the golden miraculous chain.

The interesting church at Peterchurch was visited after the party had dined. The building retains in a great degree the characteristics of the Norman times in which it was built, though touched up by "restoration" in 1869-79. The deep splayed windows all remain, with an apse at the east end, having a small window in the centre. The altar table is formed by a large and long stone, having the usual five crosses upon it. This had been removed from the church in Puritan times, but the present vicar restored it to its former position. A painted sculptured stone is let into the south wall of the nave, representing a fish having a golden chain proceeding from its gills. This sculpture now placed in the wall, is said to have been copied from an older sculpture placed in the church in former times. The original Norman font yet remains, and the tower at the west end of the fabric is surmounted by a spire that is seen from afar. In the churchyard is a grand old yew tree, whose size is remarkable, the bole being 28 feet in girth, and a seat extends all round it.

The churches of Vowchurch and Turnastone were next inspected. To the names a legendary derivation is ascribed, the story being that two maiden sisters determined each to build a church. One of them exclaimed, "I vow my church shall be on this side of the river," upon which the other replied, "I'll build mine on the other side before you can turn-a-stone!" Turnastone, however, has fallen into a state of woe-worn desecration, and, but for its little bell-cot might be taken for a neglected barn. On one side of the altar, on the floor, is a sculptured gravestone representing a knight in plate armour and wife by his side, with the date of 1535.

The Abbey Church, Abbeydore, was last of all visited and described by Rev. A. Phillips, rector. It has a cathedral-like aspect, although divested of its nave, the existing remains being a western transept, chancel, north and south aisles, and porch, with a central tower, the upper embattled part being of later date than the base. The abbey was founded for the White Monks or Cistercians, about the end of the reign of Henry I. King John increased their possessions by a grant of all the land between the Dore and the Trival Brook. In the 31st of Henry VIII., the abbey and lands were granted to John Scudamore, of Holm Lacy, who afterwards purchased the tithes which were originally granted to the Earl of Devonshire. The chapter-house, cloisters, and other buildings belonging to the abbey were pulled down, and the materials sold soon after its suppression, together with part of the church; but enough of the latter is still left to show its form and the beauty of its architecture. During the reign of Charles I., John, Viscount Scudamore, obtained a license to rebuild this fabric, and to endow it with all the tithes of the parish. It was not, however, entirely rebuilt, but underwent considerable repairs, and in 1634 was re-consecrated by the Bishop of St. David's, and opened as the old parish church. The communion plate, silver flagon, chalice, and paten were all bought with a purse of gold given at an offertory by Lord Scudamore, in the reign of Charles II. At the time of the demolition of the abbey, the altar stone having been thrown down had become a salting stone at a farmhouse, and as such it was discovered and replaced where it now stands. It is a single stone 14 feet long, 4 feet wide, and 3 inches thick. There are here several curious monuments, also a remarkable stone coffin, which was found under the church. Beneath an arch in the ambulatory is a mutilated figure, carved in freestone, in chain armour, said to be the effigy of Robert de Ewias, founder of this abbey; another broken and defaced statue in the north aisle, also in chain armour, is said to represent Sir Roger de Clifford, the younger, who was buried here. On the south side of the choir is a very curious massive altar tomb, with coats of arms and Latin inscriptions all round, but difficult to read, to the memory of Sarjeant Hoskynes, who lived in this parish, and was far-famed for his hospitality, and many years kept open house to all who honoured him with a call.

The abbey is of transitional style between Early English and Norman. The aisles and ambulatory are vaulted plainly, but the roof of the chancel is flat and unadorned. Stained glass of older date only remains in the east window of three-lancet lights.

The Wells Charity Estate, Cardiff, consisting of about 13 acres, has been laid out for building purposes, and the governors are now prepared to receive tenders for forming and sewerage some of the streets. Messrs. W. D. Blessley & Aspinall, of Cardiff, are the surveyors.



## NOTES AND COMMENTS.

THE sincerest tribute that could be paid to Mr. GEORGE W. REID is to be found in the regret with which the tidings has been received of his resignation of the post of Keeper of the Department of Prints and Drawings at the British Museum. We wish we could, while expressing our regret, have also offered Mr. REID our congratulations on retiring to enjoy a well-earned repose after forty years of labour devoted to the public interests, but we are sorry to find that failing strength, rather than a desire for rest, has caused Mr. REID to relinquish his post. It is not easy to enumerate the lovers or the followers of art who have not had experience of the kindness and courtesy of Mr. REID, and we are glad to take this opportunity of acknowledging our own indebtedness to him on many occasions, not the least of which were the facilities he afforded us by which we were enabled to reproduce a series of facsimiles of the studies of the great painters of Europe, the first of which, RAPHAEL's study for *The Massacre of the Innocents*, was published in *The Architect*, May 6, 1876. We trust Mr. REID will soon recover health, and long enjoy the rest he has so well earned.

THE collection of works of Indian art selected by Mr. CASPAR PURDON CLARKE for the Science and Art Department was opened to the public on Tuesday. It will be remembered that Mr. CLARKE, on the transfer of the old India Museum to the charge of the Science and Art Department, was sent to India for the purpose of making purchases of Indian art objects, the expenses of the mission, amounting to 8,000*l.*, being borne by the Education Board and the India Office. In recognition of his services to Indian art, Mr. CLARKE has received the Companionship of the Indian Empire.

THE barn at Great Coxwell, in the Vale of the White Horse, was visited lately by the members of the Berkshire Archæological and Architectural Society. It was built by the Abbots of Beaulieu, to whom King JOHN, in 1204, granted the manor. The barn measures 148 feet by 40 feet, the walls being 4 feet in thickness. The farm to which it belongs has been rented by the GERRING family uninterruptedly for the long period of 325 years. After the Restoration the manor of Great Coxwell was granted to the family of MORYS or MORES, who had been lessees under the Abbey. This family held it till the year 1638, when it passed through other hands until it came to the possession of the present owner, the Earl of RADNOR. The great barn was doubtless occupied by MORYS. The mouldings and corbels of the barn show that it belonged to the Decorated period. There are cranes on the gables. The original roof remains. It consists of plain open timber, carried partly on two rows of massive square oak pillars, resting on stone plinths. The barn resembles the interior of a church, with nave and side aisles, transepts or porches. The barn at Cholsey, near Wallingford, which belonged to the Abbot of Reading, was of still greater dimensions, being 51 feet in height, 54 feet in width, and 303 feet in length.

WHERE are the sanitary authorities in the parish of St. Giles, Camberwell? Mr. REDDIN evidently does not believe in their existence, nor would he seem to have much regard for the health or for the lives of his fellow-creatures, if one is to judge by the shocking revelations made before Mr. Justice MATHEW in the case of *CORRIE v. REDDIN*. This enterprising person, having taken a long lease of land on the south side of the Grand Surrey Canal, in St. Giles's parish, Camberwell, proceeded to utilise it to the best advantage to himself by digging out, carting away, and selling all the sand, gravel, and soil which he conveniently could. This was not quite a proper proceeding on the part of Mr. REDDIN, inasmuch as in doing so he was appropriating the freeholder's property; but it was a trifling matter in comparison with Mr. REDDIN's subsequent conduct. His excavations formed a pit of great extent and depth, which he proceeded to fill up with stuff of the foulest character—filth and refuse, collected in the course of his occupation as a scavenger. "To call the pit a dung-heap," said Mr. Justice MATHEW, "would be a flattering phrase." Upon this festered mass Mr. REDDIN intended to build houses. Truly indeed did the learned judge remark that "dwellings built upon such a soil would be mere pest-houses, and that no persons could live in them without injury to their

health, and serious risk to their lives." And yet the sanitary authorities did not interfere! Perhaps they were awaiting further development of the hideous project; perhaps they were blind to its existence altogether. In either case here is a danger to the public health, which, had it not been happily averted by the action of the freeholder, might have caused untold misery and disease. The individual conscience of a man who could deliberately work, or intend to work, such evil for his own miserable aggrandisement is of less consequence than the state of the law, which allows the existence of such a state of things. Public health legislation should be no longer permissive in character; it should be compulsory and penal. The good of the people at large requires protection against corrupt dwellings as much surely as against "corrupt practices" of another kind. Cases of the kind we have referred to are not exceptional. They are of daily occurrence, and the disease and misery that result to innocent persons are incalculable. English people are generally accounted slow and clumsy in matters of this kind, but it is trifling with death to delay longer the necessary legislation.

At the annual general meeting of the Society of Arts, held on Wednesday, June 27, the following resolution was passed: "That this meeting of the Society of Arts desires to express the deep regret with which it has received the news of the death of Mr. WILLIAM SPOTTISWOODE, one of its vice-presidents, and its sense of the loss which the Society has sustained by his decease. In him England loses one of her most remarkable men of science, science itself one of its greatest ornaments, and all who knew him a sincere and valued friend. Besides devoting his own time and thought to the advancement of knowledge, he was ever ready to lend to all engaged in like pursuits the assistance of his experience and his wise counsel. In thus placing on record their own appreciation of his services, the Society desires to express its feelings of sympathy with his widow and his family, and also with the Fellows of the Royal Society, of which he was the honoured and beloved president."

THE loan exhibition of works of old masters, inaugurated at Edinburgh by the Board of Manufactures, was opened publicly on Saturday last. Sir W. FETTES DOUGLAS, P.R.S.A., it may be mentioned, as a member of the hanging committee, took a prominent part in the labours that preceded the opening. The project is considered to be a sort of revival, after the lapse of half a century, of the exhibition of works of old masters held for many years under the auspices of the Royal Institution, so that the exhibition may rather be said to be a resuscitation of an old custom than a new venture. The present exhibition, it is likely, will be but the first of a new series of annual exhibitions devoted to the illustration, if not always of old works, to that of other departments of art. In the list of contributors, which is headed by the QUEEN, are the names of many of the leading nobility and gentry.

A POLICE magistrate who cannot understand the difference between a brick on edge and a breastsummer is scarcely, one would imagine, a competent authority to decide questions relating to defective construction of buildings. When we are told, however, by so-called expert witnesses that 8-feet breastsummers usually deflect a quarter of an inch of their own weight, we are less surprised at a decision which at first view was calculated to astonish the most speculative student of magisterial decisions. The district surveyor of Hammersmith summoned a builder for dangerous construction. An opening in a wall, 8 feet wide, was bridged over by a badly-constructed beam which was not trussed, and, in consequence, had deflected, and seemed to be in a fair way to let down the brickwork above. The magistrate, after hearing the evidence just mentioned, said he could not understand the question, and dismissed the summons. The six houses in Brackenbury Road, Hammersmith, will therefore continue, so long as natural laws of gravitation permit, to enjoy their deflecting beams and fractured brickwork. But it is not a consolatory reflection for the general public that they are so permitted to remain because the learned magistrate "did not understand the question." It is generally a mistake for a judge to give his reasons, and in this case, if the structures should at a future time unmistakably demonstrate their dangerous qualities, the reason given for dismissing the summons will hardly be considered satisfactory.









THK PHOTO  
Sprague & Co. 22, Mark Lane, London E.C.

HOSPITAL FOR WOMEN, CHELSEA.  
J.T. SMITH, ARCHITECT.



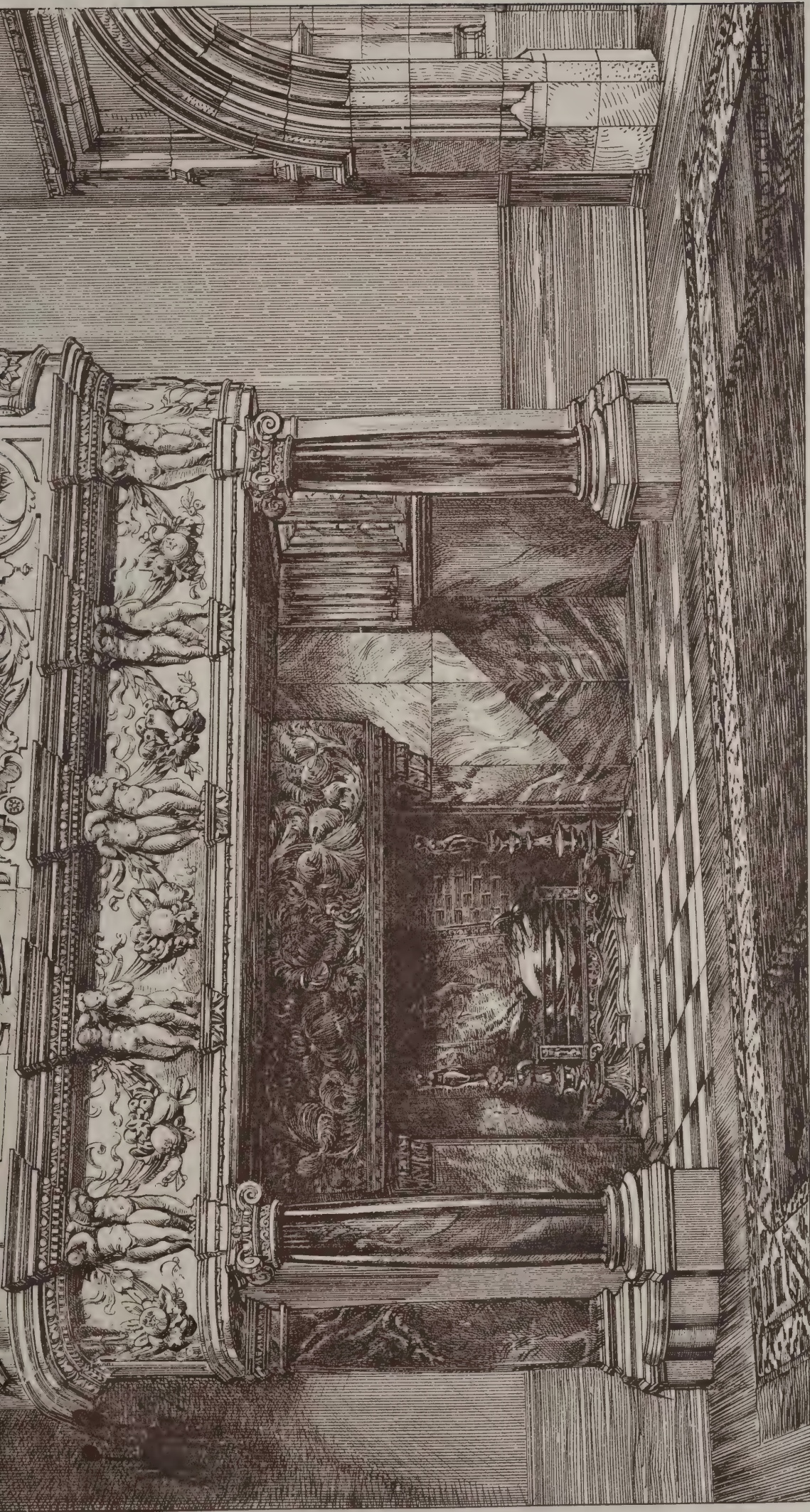




The Architect: July 7<sup>th</sup> 1883.







CHIMNEY-PIECE IN THE PICTURE GALLERY, CRAGSIDE.

R. NORMAN SHAW, R.A. ARCHITECT.













INCRES. PING. BAT.

MOERSTE TAMEN ET CIRCUMSECTO IUDICIO DE TANTIS  
REBUS PROCAVENDUM NE TOMOS FLERISQUE SOCIIS  
COMMITTI LOVSE NON INTELLIGAMUS SUCCESSU  
FUTURAM UTERRARE SAPIAM OMNIA EORUM LEGENTIBUS  
PLACERE QUAM MVLTIS DISPLICERE MALVERIM  
INST. OR. LIB. X. CAP. QVINTILIANVS. S.



July 7<sup>th</sup> 1883.



S OF HOMER.

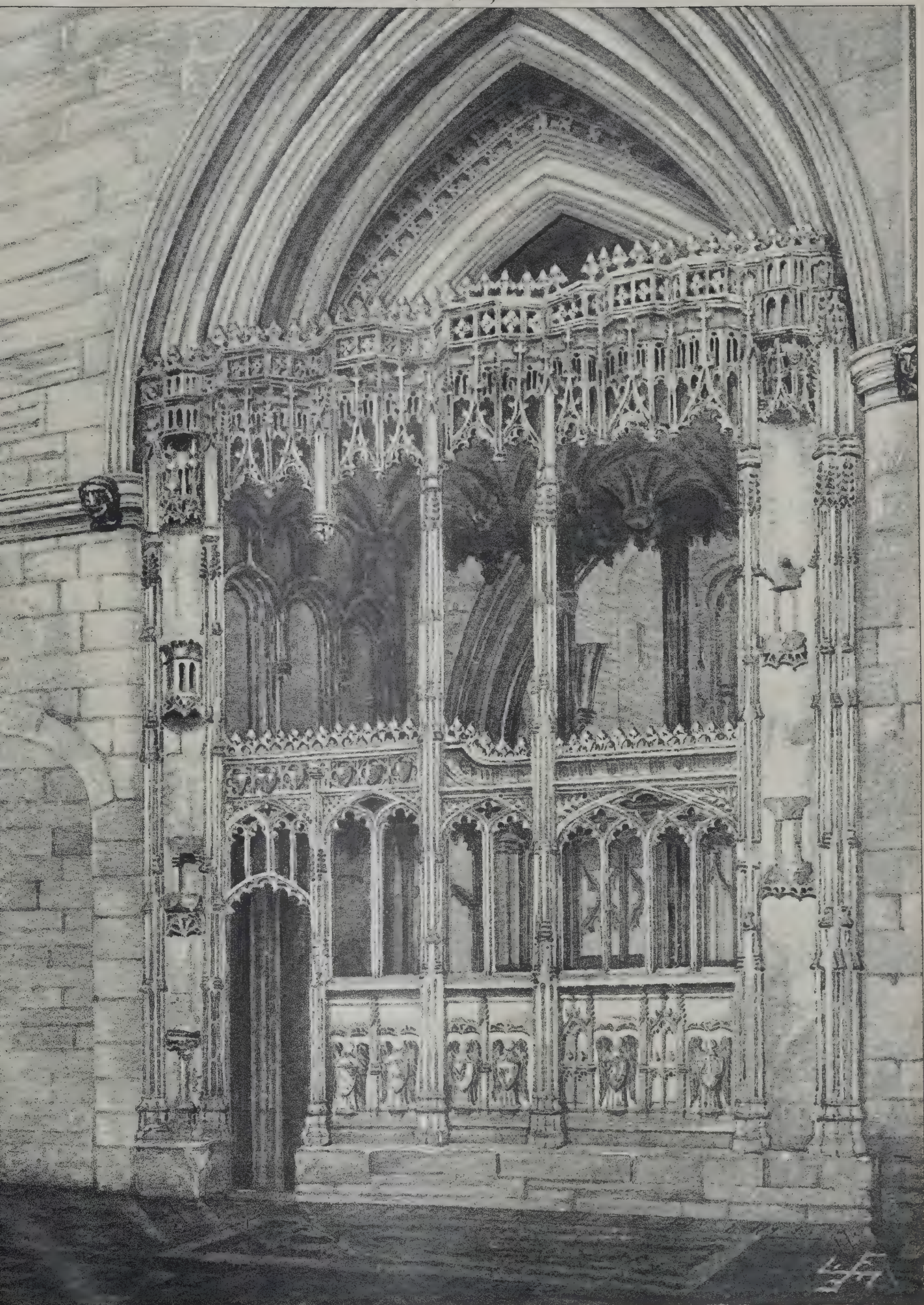
NGRES.

22 MARYS Lane Canon St EC









PHOTO, SPRAGUE & CO, LONDON.

WARWICK CHAPEL, TEWKESBURY ABBEY.

DRAWN BY R. KNILL FREEMAN, F.R.I.B.A.







## ILLUSTRATIONS.

CHIMNEYPIECE, CRAGSIDE.

THIS fireplace is now being executed in marble and alabaster for a new drawing-room at Cragside, Northumberland.

THE APOTHEOSIS OF HOMER.

THE paintings which adorn the ceilings of the galleries of the Louvre are not as well known to English visitors as the paintings which are hung on the walls. But some of the greatest of modern French artists were commissioned for those ceilings. One of the plafonds is by INGRES, who was the head of the Classical school. He selected the *Apotheosis of Homer* as the subject for one of the plafonds in the gallery of Greek and Roman antiquities. Although the picture is somewhat sculptural in character, the treatment is different from that of the ancient bas-relief of the *Apotheosis* which is in the British Museum. M. INGRES imagines HOMER to be seated before a temple dedicated to himself and standing on Parnassus. He is crowned by Glory. At the foot of the throne are two ideal representatives of the "Iliad" and the "Odyssey," and on both sides are the artists—poets who are supposed to have derived inspiration from the poems. On the right are PINDAR with the lyre, HERODOTUS, PLATO, SOCRATES, PERICLES, PHIDIAS, who offers a sculptor's mallet, ARISTOTLE, who, according to some critics, is supposed to resemble M. INGRES, and ALEXANDER the Great, with the casket which he ordered as a shrine for the "Iliad" and the "Odyssey." Opposite are ÆSCHYLUS, SOPHOCLES, and EURIPIDES; APOLLO is leading RAPHAEL, while VIRGIL conducts DANTE. Below may be seen NICHOLAS POUSSIN, CORNEILLE, and SHAKESPEARE; and on the corresponding level on the right BOILEAU, MOLIÈRE, and RACINE. Behind are LONGINUS, who is writing, FÉNÉLON, the half-blind CERVANTES, and GOETHE. It may be mentioned that a copy of the *Apotheosis* forms a screen behind the statue of the painter which is in Montauban.

INGRES was born at Montauban in 1781, and studied painting under DAVID. He carried off the Grand Prix in painting. In 1824 he received the Cross of the Legion of Honour, and the next year was elected member of the Academy. His pictures were mainly historical, and many of them were glorifications of France. M. INGRES died in 1867, and many eminent artists acknowledged him to be the chief of the French school.

WOMEN'S HOSPITAL, CHELSEA.

WARWICK CHAPEL, TEWKESBURY ABBEY.

THIS illustration has been taken from a water-colour drawing by Mr. R. K. FREEMAN, F.R.I.B.A., of Bolton.

## EDINBURGH ARCHITECTURAL ASSOCIATION.

AT the last meeting of this Association, reports by the hon. secretary, treasurer, &c., were submitted. Mr. David MacGibbon, president, occupied the chair. The report of the Council stated that the session now almost concluded was the most successful in the annals of the Association. With regard to the Architectural Exhibition, the contributions, both as to number and merit, vastly exceeded the most sanguine expectations. Exhibits were received not only from all the great centres of architectural art, but also from many of such private collections as contained the works of deceased or ancient masters. During the session volume iii. of the "Sketch Book" has been issued, and arrangements made for the publication of volume iv. The committee have been encouraged by the success attending the publication of the "Sketch Book" to venture upon improvements in the forthcoming volume, which would very much increase the value of the work. With reference to the membership, the society has great reason to congratulate itself. At the beginning of the financial year the members numbered 139, while now there are 235 on the roll. The names of 11 old members were during the year withdrawn; while 107 gentlemen were proposed, balloted for, and duly admitted. The numerical gain during the session is 96. The Council were happy to be able to announce that several new and important features will be added to the proceedings of the Association during the ensuing session. Besides the ordinary fortnightly papers, a series of lectures on "Early Christian Art" has been promised by Professor Baldwin Brown. There would also be inaugurated two classes for the study of construction and design, which would be worked upon the lines of similar classes carried on by the London Architectural Association and the Royal

Academy. The treasurer's report was also of a satisfactory nature, and showed a balance in hand.

Mr. Rowand Anderson, in moving the adoption of the report, said the Association now occupied a position second to none among Edinburgh societies. Their Architectural Exhibition was one of the events of the season; and while such an exhibition could not be repeated every year, it should not be lost sight of. As to the papers read and lectures given during the past session, he ventured to say that they were as varied and as interesting as those which had occupied the attention of any other society. He was a member of two other societies—the Archæological and the Royal Society. At the Archæological they had a good many papers about kitchen middens and other savoury subjects; while at the Royal Society they got a heavy dose of Professor Tait. At the Architectural Society they had a selection of papers interesting both to professional men and outsiders. The reports were adopted. The following office-bearers were elected for the next session: President, David MacGibbon; vice-presidents, G. Washington Browne and Hippolyte J. Blanc; hon. secretary, T. Fairbairn; and hon. treasurer, R. A. Menzies.

On Saturday last the sessional proceedings of the Association were closed with an excursion to Haddington and neighbourhood. The party, headed by Mr. MacGibbon, president, were met at the Haddington station by Mr. David Croal, author of "Sketches of East Lothian," who conducted them through the town, pointing out the chief places of historical interest, such as the house in which Mrs. Carlyle was brought up, the building in which Edward Irving taught for several years, and Bothwell Castle—still in a remarkable state of preservation, though occupied by people of the poorer class—in which, according to local tradition, Queen Mary spent a night. Crossing the Tyne, the party visited the ruin of St. Martin's Chapel, a building of venerable antiquity. Returning from the Nungate by the bridge of the same name, attention was directed to the public bowling-green, and mention made of the fact that it is the oldest in Scotland, the Council records showing that it was formed more than two hundred years ago, and has been played on every season since. An examination was next made of the "Auld Brig," on the south side of the westmost arch of which was pointed out the iron hook from which criminals were suspended in a bygone age. Having viewed from a distance the oak tree which the late Thomas Carlyle caused to be planted in Giffordgate to mark the spot where stood the house in which John Knox was born, the party entered the churchyard, in which Mr. M'Lachlan read a short paper descriptive of Haddington Church, directing attention to the fact that few of the meritorious specimens of Gothic architecture in Scotland had received so little attention as this edifice. The architecture was, he pointed out, marked by the features of the transition from the early to the later period of the decorated style. The western doorway and the triple arches of the tower window, though exhibiting the semicircular form peculiar to Norman architecture, belonged to a much later period, the former exhibiting a great variety of decoration. Some of the carvings on the building are, Mr. M'Lachlan added, exceedingly curious, and some rather indecent. There are grotesque human faces and animals of various kinds, including the pig, dog, squirrel, fox, and goose; while on a buttress supporting the east gable there is a representation of a man playing upon the bagpipes. Passing through the churchyard, the party examined some of the more notable tombstones, such as those of the Lauderdale family, Mrs. Carlyle, and the Rev. John Brown. Having lunched in the George Hotel, the party drove in waggonettes to Whittinghame and Stonepath Towers, which were explored under the direction of Mr. Ross, after which they walked to Nunraw Castle. Mr. Thomas Bonnar, who some years ago made drawings of an interesting ceiling in the house, gave a sketch of the building, pointing out that probably not less than five centuries had passed since it was erected as an appanage to the nunnery at Haddington, and that in many of its features the house must in its best days have presented an admirable specimen of the style of architecture known as the "Scotch baronial." Mr. Bonnar detailed the circumstances connected with the renovation of the Castle, commenced in 1864, and the discovery of relics of mediæval art on the ceiling of what was supposed to have been the refectory of the nunnery. Mr. Bonnar exhibited a drawing of a somewhat similar ceiling in the Council Hall of Linlithgow of date 1570, the points of resemblance being so close that the opinion was hazarded that both had been designed by the same artist. The party afterwards drove to Yester House, through which, in the absence of the Marquis of Tweeddale, they were conducted by Mr. Swinton, factor on the estate, who described the numerous family and other paintings on the walls, as also many other interesting features of the mansion. Much admiration was excited by the hand-wrought plaster work with which many of the walls and ceilings are ornamented. A visit having next been paid to the old parish church, which is now used as a family burying-ground, a vote of thanks was awarded to Mr. Swinton, after which the party returned to Haddington en route for Edinburgh.

The Sudden Death on Thursday last week of Mr. H. F. Turtle, editor of *Notes and Queries*, will be much regretted by many of our readers.



## ROYAL ARCHÆOLOGICAL INSTITUTE.

THE annual congress of this Institute will commence at Lewes on Tuesday, July 31, when the members will be received by the Mayor and Corporation at an inaugural meeting. The proceedings will be as follows:—

President's Address at the inaugural meeting. Reception of the Sussex Archæological Society at the Castle. Remarks by the Rev. W. B. W. Stephens on the Battle of Lewes. Inspection of the Castle and the Priory, to be followed by general perambulation of the town, and visit to the field of the Battle of Lewes. Mr. Freeman will open the Historical Section at 8 p.m.

Aug. 1.—By rail to Pevensey; Castle and Church. To Rye; Land Gate, Ypress Tower, luncheon. To the Church. To Winchelsea; Church, Town, Gateways, Chapel of Franciscans, &c. By rail to Lewes. Mr. Micklethwaite will open the Architectural Section at 8 p.m.

Aug. 2.—By rail to Hastings; to the Castle. By rail to Battle Abbey. Mr. Freeman will take the party in hand. Luncheon at Battle. By rail to Lewes. Conversation by the Mayor of Lewes in the Assembly Rooms, at 8.30 p.m.

Aug. 3.—Annual Meeting of the Institute. Major-General Pitt Rivers will open the Antiquarian Section at 11 a.m. Excursion by road to Mount Caburn. Major-General Pitt Rivers will take charge of the party. To Glynde Station. By rail to Hailsham; by road to Hurstmonceux, Castle and Church; to Pevensey Station, by rail to Lewes. Sectional Meetings at 8 p.m.

Aug. 4.—By rail to New Shoreham; to the Church. By road, *via* Old Shoreham Church, to Sompting Church; to Broadwater Church; to Worthing, luncheon. To Arundel Castle; Clock Tower, Keep, Church, and Maison Dieu. By rail to Lewes.

Aug. 6.—By rail to Chichester. General concluding meeting in the evening.

## LONGLEAT.

LONGLEAT, the residence of the Marquis of Bath, was visited last week by the Newbury Field Club, when Canon Jackson read a paper describing the building. In the course of it, he said: As to the name of the house, the word *leat* was an old noun, signifying water-course or aqueduct, which occurred in old Acts of Parliament, and was used in Scotland to denote a mill-stream. Probably the stream from Horningsham, now supplying the garden, was originally used for turning a mill. The name first occurred in a Latin document dated 1289, granting certain tithes to the priory of "Langelete." It was sold in 1540 to Sir John Thynne, who in 1546 began building a house, which, however, was burnt in 1566. Next year he commenced afresh, and produced the present house. He employed an architect, whose name, singularly enough, did not appear in any of the accounts for the building. Canon Jackson then described the prevailing domestic architecture of England in that and the preceding periods. When England was torn in pieces by baronial jealousies, the houses of the nobility were nothing else than fortified dungeons, and the fashion of providing for self-defence lingered long after the necessity had ceased. In the reign of Henry VII. these castellated houses were chiefly built with high ornamented gateways, and large projecting windows, of which the front of St. James's Palace, in London, and of Eton College, gave an idea. This style was in the main Gothic—pointed church architecture applied to houses. In Wiltshire specimens of this ecclesiastical tone were found in South Wraxhall House, near Bradford, the property of Mr. Long, in Place House, Tisbury, at Norrington, in the Bishop's Palace at Salisbury, and at Great Chalfield House, near Bradford. The farmer's wife, at an old house, often said, "it was once a nunnery or kind of abbey," the style of building leading, somewhat erroneously, to this idea. Henry VIII. introduced a new style—the ancient architecture of Greece then lately revived in Italy—and upon the expiring ecclesiastical or Gothic style the Corinthian, Ionic, or Tuscan was engrafted. Longleat was one of the purest examples of this novel mixture, and externally was a complete specimen of its period. The balustrades, cupolas, and statues on the top, and the present hall door, were not original, but rather later; otherwise there had been no material change. There were the large mullioned windows of the earlier period of Henry VIII., and of the three storeys the pilasters in the lower were Doric, in the middle Ionic, and in the highest Corinthian. The architecture of the house was Grecian or Italian; yet its general effect was very much that of the old English Ecclesiastical. This style was on the whole adhered to in the reign of Edward VI. and the earlier part of Elizabeth, but declined towards the reign of James I. Tradition said the architect was John of Padua, he and Holbein, the painter, being the two foreigners mostly employed by Henry VIII. in introducing the new style. Canon Jackson then discussed the probability of John of Padua having been the architect, and said he thought one Smithson, the architect of a very similar mansion—Wollaton House, near Nottingham—had something to do with the design. In 1575 Queen Elizabeth visited Sir John Thynne. In 1663 the estate came to a Thomas Thynne, who was shot in 1682 in Pall Mall by the agents of a rival in a love affair, and whose relative Thomas Thynne, after succeeding, was created

Viscount Weymouth. The latter was Bishop Ken's friend and owned the property for thirty-two years. The second lord resided there for a time and kept a hunting establishment but afterwards forsook the place. The third lord, on coming of age in 1754, found the old Dutch gardens fallen into disorder, and called in the celebrated landscape gardener, Brown, who, from his habit of speaking of the great "capability" of grounds, earned the name of "Capability" Brown. Under his directions the Dutch formalities disappeared, and the natural stream, which was deemed insignificant and incommensurate with the grandeur of Longleat—for with the house, gardens, and demesne under the eye Longleat was the very *beau ideal* of an English baronial residence—had to be brought forward in proportion to the other features. At a prodigious expense a plan was carried through by the third Lord Weymouth (created Marquis of Bath in 1789) which produced the idea of a large river flowing through the demesne, widened by serpentine lines into a lake. The Marquis, in 1789, had the honour of receiving as guests at Longleat the King, Queen, and Princesses. The grandfather of the present marquis expended large sums at the beginning of this century on the corridors and large staircase, and the present owner had greatly embellished the interior by newly furnishing sets of rooms long unoccupied.

## EXPLORATIONS IN EGYPT.

A GENERAL meeting of the Egypt Exploration Fund was held on Tuesday afternoon, at the Royal Institution, Albemarle Street, Sir Erasmus Wilson in the chair. The object of the gathering was to hear M. Naville's discourse on his excavations at Pithom-Succoth. Sir Erasmus Wilson opened the business of the meeting. It was reported that by a small outlay, and in six or seven weeks, the society had discovered the remains of the historic city of Pithom, the true route of the Exodus, the second halting-place of the Hebrews, and had placed beyond doubt that the Pharaoh of that time was Rameses II.

The chairman proposed that the monuments should be presented to the British Museum, and this was seconded by Mr. William Fowler, M.P., and passed unanimously. The monuments were accepted by the principal librarian of the British Museum on behalf of the trustees.

M. Naville then proceeded with his narrative, which was one of much interest, and was listened to with deep attention.

A hearty vote of thanks to M. Naville, moved by Mr. W. Fowler, M.P., brought the proceedings to a close.

## RAILWAY BRIDGE OVER THE NIAGARA.

A NEW railway bridge is about to be constructed over Niagara River by the Canada Southern Railway, some 300 feet higher up the river than the present suspension bridge, and the work is to be pushed forward so as to be completed before next winter. It is to be built on the same plan as the new Tay Bridge in Scotland, and known as the cantilever bridge. Each end is to be made up of a section extending from the shore nearly half-way across the chasm, and these sections are to be supported underneath by a strong pillar tower, whilst the shore ends will be so heavily weighted and anchored as to counterbalance the weight on the unsupported end. Between the towers there will be a clear span of 500 feet over the river, the longest double-track truss span in the world. The total length of the bridge will be 895 feet; it will have a double track, and will be built of a strength sufficient to bear two of the heaviest freight trains extending its entire length. From the tower foundations up the whole bridge will be of steel, every inch of which will be subjected to the most rigid tests, and every step taken that can possibly be thought of to insure strength, safety, and durability.

## UNIVERSITY COLLEGE, LONDON.

THE following are the results of the examination of students in the architectural classes, 1883, under Professor T. Roger Smith.

*Fine Art Class.*—Donaldson Silver Medal—H. H. Mew. Prize of books—W. E. Potts. 1st class certificate—E. W. Knight.\* 2nd class certificates—H. Berney, A. T. Bolton, T. Leadbitter, S. H. Seager, R. K. Weymouth. 3rd class certificates—T. D. Atkinson, A. M. Buller, J. A. Minty, A. C. Wood, F. Taylor.

*Construction Class.*—Donaldson Silver Medal—H. Berney. Prize of books—E. L. Conder. 1st class certificates—A. C. Houston,\* A. M. Buller.\* 2nd class certificates—A. S. Flower, T. Leadbitter, S. H. Seager, A. C. Wood. 3rd class certificates—E. Boardman, S. Clarke, J. A. Minty, J. F. O'Connor, W. H. Raffles, R. K. Weymouth.

*Modern Practice Class.*—Prize—T. Leadbitter. 1st class certificates—H. Berney,\* S. H. Seager.\* 2nd class certificates—F. Massie, G. H. Minty. 3rd class certificates—C. H. Aitken, T. D. Atkinson, E. T. Boardman.

\* With marks sufficient to qualify for a prize.



## PRINCESS ALICE HOSPITAL.

THE opening of the Princess Alice Memorial Hospital at Eastbourne took place on Saturday last. Their Royal Highnesses the Prince and Princess of Wales, accompanied by the Princess Elizabeth of Hesse (second daughter of the late Princess Alice), arrived by special train at Eastbourne at one o'clock, and proceeded to the hospital, where their Royal Highnesses were received on alighting by the chairman, the Rev. Canon Whelpton; the treasurer, Mr. George Gurney; and the honorary secretary, Mr. J. H. Campion Coles, who conducted them through the pavilion to the entrance of the hospital, where they were received by the architect, Mr. Thomas W. Cutler, F.R.I.B.A., and Dr. Gream. The Prince of Wales opened the entrance-door with a ceremonial key, which was designed by the architect, and manufactured by Messrs. Chubb & Son. The key was of chiselled and polished steel, inlaid with gold. The handle was in form of a Tudor rose, with the letter A, for Alice, inlaid in gold in centre, the whole surmounted by a princess's coronet. Up the stem was entwined a gold snake. An inspection of the administrative building and wards was then made under the guidance of the architect. Their Royal Highnesses then returned to the pavilion, where, after a short service, the Prince of Wales declared the hospital open.

## DEVIZES CASTLE.

THE Devizes Castle Estate is, we understand, for sale. This important residential property is exceptionally rich in historical associations, having been built in the reign of King Henry I., and occupied by his daughter, the Empress Matilda. Since that time it has formed part of the dowry of twelve of the queens of England, and had until a comparatively very recent date all the immunities of a royal castle. It is situated at an elevation of 400 feet above the sea level, and holds a position in respect to the town of Devizes similar to that of Windsor Castle to the royal borough. The original structure, of which some portions still remain, was built by Roger, Bishop of Salisbury, in the reign of Henry I. A writer, describing the building, says:—

The bishop's four principal castles were those of Old Sarum, Sherbourn, Malmesbury, and Devizes. His culminating ideas of military architecture were realised and displayed in the towers of Devizes. In the construction of this vast edifice, which the monkish historians with unanimous voice declare to have been the most formidable in England, he gave full scope to his aspiring tastes, and lavished upon it, says Malmesbury, "great and almost incalculable sums." The bishop's own expression was that "he built the castle of Devizes for the ornament of the Church," and Ordericus Vitalis uses the emphatic words, "There was not a more splendid fortress in Europe."

The dominating part of the structure was, no doubt, the massive central donjon or Norman keep (an approximate judgment of which may be formed by reference to the contemporaneous keep of Rochester, still standing), a square double-walled building, containing the state apartments of the sovereign; and deep below, the prison vaults. The ballium or court around this keep was environed with subordinate towers, and other buildings for warehouses, kitchens, and barracks. Then we descend to the moat, whose inner bank bristled with wooden palisades, and across which the fortified passage appears to have occupied much the same place as the modern roadway, on the north side. In completing the defences, the engineer drew his lines around a considerable space lying beyond the moat, constituting what was called the barbican, guarded in like manner with turreted walls. The strength of the gangway in this direction, that is, towards the town, may be estimated by the fact that it was furnished, at suitable intervals, with no less than seven or eight portcullises.

In 1146, Stephen, suspecting Bishop Roger favoured Matilda's pretensions to the crown, ordered the Bishop of Ely, who was then holding the castle for Roger, to hand over to him possession of the castle. This he refused to do; upon which Stephen laid siege, but perceiving that, owing to the great strength of the edifice, the siege would be long protracted, he resorted to the following expedient: Having ascertained Matilda of Ramsbury, the Bishop's "Lady," was also in the castle, he erected a tall gibbet on an opposing eminence, still called "Gallows Ditch," and forthwith announced to the dame that its object was for the immediate execution of her son, the Chancellor, unless she prevailed on the Bishop of Ely to surrender the place, adding also, that neither was her lord, the Bishop of Sarum, to be suffered to eat or drink until the terms were complied with. To heighten the scene he caused the unhappy Chancellor to be arrayed in irons, and, with a halter hanging about his neck, to be led, in company with his aged father, to the very gates of the castle, for the purpose of exercising their personal influence on her feelings. The Bishop of Ely remained inexorable. For three days the king subjected his unfortunate prisoners to all the miseries of ignominy and famine. They were confined in vile and loathsome hovels awaiting their doom. At last Matilda contrived to elude the watchfulness of the Bishop of Ely, and delivered the fortress into the hands of

Stephen, thus saving the lives of her son, the Chancellor, and his father.

The castle was shortly afterwards occupied by the Empress Matilda; she had fled thither to take refuge from the persecutions of Stephen, who followed her there. In order to avoid being taken prisoner by Stephen, she caused herself to be carried out of the castle in a coffin, and was conveyed in the latter as far as Gloucester. In 1149 the castle passed into the hands of the crown, and was given as dower to the wives of various kings, viz.: The Empress Matilda, Marguerite of France, Philippa of Hainault, Anne of Bohemia, Joanna of Navarre, Marguerite of Anjou, Elizabeth Woodville, Elizabeth of York, Catharine of Arragon, Catharine Howard, and Catharine Parr.

In the reign of Henry II. the castle, with the lordship of Devizes, soon became one of the most important grants in the monarch's bestowal, and seems generally to have fallen to the lot of some special court favourite. Its dignity was enhanced by its ranking among the royal castles and State prisons, and its revenues were secured by an almost princely catalogue of feudal appendages. When made entire, the gift appears to have comprised—the castle of Devizes, body and members, the towns of Devizes and Rowde, with the advowsons of their churches, two parks of Devizes, the custody of the forests of Chippenham, Melksham, Pevesham, La Cofand, and the warrens of Marlborough.

Duke Robert of Normandy and Hubert de Burgh, Earl of Kent, were incarcerated in the dungeons of the castle. But after a prolonged imprisonment Hubert de Burgh managed an escape on Michaelmas eve, 1233. The Earl of Pembroke was much attached to Hubert, and was in the castle at the time; he carried Hubert out on his (the Earl of Pembroke's) shoulders, as the weight of De Burgh's irons impeded his movements. Hubert was borne safely through the area of the castle, thence through the "ostium," and with great difficulty across the foss, thence to the church of St. John, where he was deposited on the steps of the high altar.

The castle was besieged, and taken by Cromwell in 1645. The artillery having arrived from Trowbridge, Cromwell forthwith directed a battery mounting ten guns to be constructed in the market-place, within pistol-shot of the castle, and on the next day, Sunday, September 21, he sent in a final summons to the governor, Sir Charles Lloyd, to deliver up the place for the use of the king and parliament. As soon as Monday dawned the cannons opened upon the devoted citadel, and continued to play all that day and the following night. On Tuesday a grenada fell into the old roofless keep, where Sir Charles had deposited his powder magazine. The explosion of the missile, though it killed several men, did not ignite the powder, but apprehension of another such contingency brought the Royalists to immediate terms.

## THE SUNDERLAND HALL DISASTER.

THE inquiry held in regard of the lamentable disaster at the Victoria Hall, Sunderland, has resulted in a verdict setting forth that the victims met their deaths by suffocation on the stairs leading from the gallery, through the partial closing of a door on the landing, the door being fixed in its position by a bolt in the floor, but by whom there was not sufficient evidence to show; that the managers of the entertainment deserved censure for not having provided sufficient caretakers and assistants to preserve order in the hall; that the modes of entrance and exit in the hall were sufficient, except as regards the door, &c. Whether the verdict will prove satisfactory to public opinion remains to be seen, but it is well to recall what we have before stated, that the fatal door was an afterthought on the part of the owners, for which Mr. Hoskins, the architect of the building, was no more responsible than would be the late Mr. G. E. Street if Her Majesty's judges were to cause alterations to be carried out with regard to the internal arrangements of the New Law Courts. It is quite necessary to insist on this point, seeing the remark lately made by a contributor to the columns of the leading journal, that "an architect plans a building with the most anxious care for life, yet for want of imagination he fits a certain door to the building which enables any person to bring about wholesale destruction. Some day, the stupidity and the bolt are conjoined, and then we have such a massacre as that now under consideration at Sunderland."

The door was fixed in its position by a local joiner, by order of the proprietors.

## MANCHESTER BUILDING EXHIBITION.

THE Building Trades Exhibition, to be held in St. James's Hall, Manchester, will be opened on Thursday, July 19. The various sections will comprise architectural adornments and decoration, architectural drawings and designs of work, construction, sanitation, ventilation, paints and colours, joinery, furniture, paving, smoke abatement, and other matters. The sections will be made up as follows: Architectural adornments and decoration: wall papers, flocks, dadoes, friezes, designs, manipulative processes, staining, plaster, papier-mâché, encaustic tiles, statuary, marble,



scagliola, mosaics, terra-cotta, carved stone and wood, painted and stained glass, pottery, hand-painted china, turnery, mantelpieces and ornamental grates, architectural drawings, &c. Construction: bricks, stone, concrete, cement, plaster, damp coursing, tiles, slates, metal shingles, wood, iron, glass, and all other materials and manufactures used in building. Sanitation and ventilation: methods of ventilating buildings, sewers, &c., smoke preventers, draught regulators, self-cleansing and other cisterns, water purifying apparatus and filters, traps, sinks, closets, lavatories, baths, water meters, and other sanitary appliances. Paints and colours: dry and mixed paints, distemper, oils, varnishes, white and red lead, brushes of all descriptions. Doors, frames and mouldings, windows, staircases, parquet and other flooring. All descriptions of useful and artistic furniture, bedsteads, bedding, carpets, curtains, mirrors and looking-glasses, organs, harmoniums and pianos, cabinet work. Paving: stone, wood, concrete, asphalt, tiles, and kerbs. Smoke abatement: open coal fire grates, stoves of all kinds in operation, and other inventions for preventing smoke; appliances for heating rooms and buildings by hot air, hot water, and steam; smoke consuming and mechanical stokers, boiler furnaces, &c. Mr. A. Darbyshire, F.R.I.B.A., is the consulting architect and director. The hall will be ready for the reception of exhibits on Thursday, July 12.

### EGYPTIAN ANTIQUITIES IN ROME.

SINCE the discovery of the obelisk and the Andro-Sphinx of basalt behind the apse of Santa Maria sopra Minerva, at Rome, which were described in *The Architect* last week, a cynocephalus in black granite and the lower portion of a large three-sided candelabrum of Parian marble have been found. A second cynocephalus found on the site of the Temple of Isis and Serapis has been brought to the surface, but, like the first discovered, half of the face is wanting. The nature of the fractures, not only on these, but on the candelabrum and sphinx, show clearly that the temples must have been wrecked, and the divinities and ornaments willfully mutilated during some outburst of religious excitement.

The obelisk has been entirely uncovered. It measures 77 centimètres along each side of the base and 6 mètres 45 centimètres in height. It is proposed to erect it in the Piazza of the Roman College, which is closely contiguous to the spot where the stone was disinterred. It bears the cartouch of Rameses II., of the nineteenth Theban dynasty, the oppressor of the Children of Israel, and dates, therefore, from the time of Moses. The Andro-Sphinx and the first cynocephalus found are beautiful examples of Egyptian art. The features and details are carved with wonderful delicacy, but, unfortunately, they are both much injured. The nose of the sphinx had evidently been placed in the temple here. The right side of the face of the cynocephalus is wanting. Its eyes were made of cement or precious stones, for the one orbit left is hollow. The cartouch on the breast of the sphinx is read by the Roman Egyptologists as that of Aahmes II., of the twenty-sixth dynasty. The partly obliterated hieroglyphics on the base of the first cynocephalus dug out were conjectured to mean the name of Nakthorheb, of the thirtieth dynasty, and now the perfect cartouch of that Pharaoh is found on the plinth of the second cynocephalus.

### BUILDING REGULATIONS FOR GLASGOW.

A DEPUTATION from the Glasgow Institute of Architects waited upon the Lord-Advocate at the House of Commons on Friday in last week to urge the deletion from the Burgh Police and Health (Scotland) Bill of all clauses relating to building, and to advocate the incorporation of those clauses in a separate Act. The gentlemen present were Mr. James Thomson, president of the Institute; Mr. John Honeyman, and Mr. Campbell-Douglas.

Mr. Thomson stated that the members of the deputation had advocated for many years the adoption of regulations for building separated from the Police Bill. They were convinced that it was hopeless to expect many different corporations to act in concert in a matter of this kind, and they did not think that such a measure as they desired should be introduced by a private member, but by the Government. The principle they desired to state was that laws relating to the construction of buildings could be best framed and carried out by architects, who devoted their whole time and attention to the subject. The laws that were necessary for the proper use of buildings they proposed to leave to the administration of the Police Commissioners. In London there existed such an Act as they desired to see passed—the Metropolitan Buildings Act, which became law in 1855. This Act had worked satisfactorily since that year, and they desired to see a similar measure passed for Scotland, and particularly for Glasgow. They did not appear as owners of house property, but as advisers of the owners of property accustomed to appreciate the effect of those laws which related to heritable property and proprietary rights. They agreed with the Glasgow

Landlords' Association in thinking that many of the clauses in the new Police Bill were objectionable, but they highly approved of it becoming law if duly amended.

Mr. Honeyman corroborated what had been stated by Mr. Thomson—that their earnest desire was that the Legislature should adopt precisely the same course with regard to Glasgow and other towns in Scotland as had been followed with respect to London in 1855. They had the Metropolitan Local Management Act of 1855, and the Metropolitan Building Act of 1855, and now they desired to have a Burgh Police and Health (Scotland) Act and a Burgh Building (Scotland) Act. They submitted that the experience of the past twenty-eight years had amply proved the wisdom of separating the building clauses from the General Police Act, especially by the working of the Building Act, under which an enormous amount of work had been done. The London Act secured more substantial benefit to the public and more even-handed justice to the building owners than any other building law that had been devised. The proposal to apply it to Scotland would beget much opposition, but he did not think that should be considered an insuperable objection in view of the benefit that would be conferred. The London Act stated distinctly what the person about to build must do in the interests of the general community, and provided that at every stage of the work he must deal with a thoroughly qualified surveyor who was responsible to a local authority, and preserved the person building from delay and loss which might arise, especially in small burghs, from the manner in which the local authorities supervised building operation. The machinery of the London Act not only protected the building owners, but it provided for that strict enforcement of the law which only a skilful administrator could command.

Mr. Campbell-Douglas also spoke, submitting that all matters concerning the construction, reconstruction, or repair of property ought to be left in the hands of those who, from their special education and training, were, as a matter of course, most competent to supervise such matters. They also thought that those professional men ought to have the right on behalf of the community of seeing that clear and specific laws were laid down in all matters of construction. Owners of property or ground for building purposes had the right to know to what rules they must conform, so as to satisfy the law. They did not think building construction ought to be legislated for in a Police Bill, but that such a Bill should only take cognisance of property that had been already built.

The Lord Advocate then pointed out that there were a good many clauses in the Police Bill which did not so much aim at security of construction in buildings as at the benefits which they would confer for health purposes. Mr. Honeyman said it was not intended to interfere with those clauses dealing with sanitary matters. All matters such as the improvement of streets and drainage ought still, in their opinion, to be left in the hands of the local authorities. They simply desired to eliminate all clauses relating to reconstruction. The Lord Advocate had no doubt they would be aware that the building clauses had hitherto been administered under the General Act, and they had operated very satisfactorily under the Dean of Guild Courts and Commissioners of Police. Mr. Honeyman believed that in such cases as Glasgow they were likely to be well administered, but in smaller burghs the difficulty of administration was greatly increased. There were fewer men in those burghs who practically understood such matters, and he found that as a rule small burghs did not employ surveyors of the same efficiency as those who performed the work in large burghs. The Lord Advocate said there would be only two alternatives to securing such a high degree of skill as the deputation sought. Either the central government which they proposed to establish would have to look after buildings in all the burghs, or else it would be compulsory to have a skilled architect employed in each burgh. The latter course he considered would be impracticable. He did not much like the notion of setting up a government inspection of buildings of a very minute kind all over the country. It was a strong proposal. Mr. Honeyman admitted that the proposition they made was a radical change in the present mode of administration, but the deputation were strongly of opinion that it might be possible to make an exception in the case of Glasgow. The Lord Advocate asked what degree of authority would be proposed to be given to architects over the buildings in particular localities? that they should pass plans in the same way as Deans of Guilds or Commissioners of Police? Mr. Honeyman replied that he should pass them exactly in the same way as the district surveyor does in London. It would be his duty to see that the builder conforms to the Act, and he should also inspect the work during its progress. The Lord Advocate asked if there ever had been a proposal to extend this Act to the whole of England under the direction of a central authority? Mr. Honeyman said he made the proposition at a conference of architects in London some years ago, and it was very favourably received.

The Lord Advocate then, addressing the deputation generally, said the ideas which they had laid before him were somewhat new. The measure which they proposed would be a wide-reaching one, affecting a great many people, and it would be necessary to have the sanction of prevalent public opinion before proceeding with it. He did not think it would be advisable that any man or any



Government should introduce such a Bill into Parliament without having well ascertained the general feeling of the public upon the subject.

The deputation then withdrew.



#### Goldsmiths' Company's Prizes.

SIR,—I am sorry my not having sent any description to accompany your illustration of the silver work in last week's *Architect* should have caused an error of statement respecting it.

The salad-bowl was only one of several subjects given, some of workmanship, and others of design; and the prize, although sufficiently generous, was the comparatively modest sum of 15*l*.

I am, yours obediently,

July 2, 1883.

W. R. LETHABY.

#### Reform in Modern Costume.

SIR,—Mr. Gotch has called attention in the pages of a contemporary to some possible reforms in modern costume. This subject is so peculiarly fit for discussion in your paper, which has from the very beginning been devoted to what the late Sir Gilbert Scott termed the "Arts accessorial to Architecture," that I venture to add a few suggestions.

Since the abandonment of crinolines, ladies' costume has, at rare intervals, exhibited such beautiful and sensible fashions that one can only pray that the fair creatures may not only know when they are right, but act upon this conviction by not going astray again. Many of them are now trying our sense of beauty very sorely by wagging about in crinolettes, and many—very many—are trying our deeper feelings (bearing in mind II. Corinthians, chap. ii. verse 15) by cutting their hair quite short. This may be a result of the prevalent rage for burlesque actresses attired (?) as—and yet as much as possible unlike—men; a custom most laudably set at defiance by Mr. Gilbert in all his light operas, where all the men are men, and all the women are women, and consequently far handsomer and more beautiful than when they are transmogrified. There is nothing more beautiful in costume than hanging drapery, but it should be chiefly hung from the widest part of the body, from the shoulders of men and from the hips of women, and the draped fairies in "Iolanthe" may be safely backed against all the regiments and battalions of undraped *figurantes* at other theatres for beauty in costume.

The attribution of short hair to the example of burlesque actresses may, however, be resented by some ladies, so we will say that it is for convenience in drying it, in view of the forthcoming sea-bathing season.

Women's fashions are so ephemeral, owing to the passion for novelty, that the only thing we can do is to guard our collections of Mr. du Maurier's drawings in *Punch* and elsewhere (fashion plates are useless) in order to select graceful figures from them for our use in decorative painting and sculpture. I had the honour of reading before the Architectural Association (I won't say how many years ago) a paper on "Figure Drawing applied to Architecture," with the object, partly, of making our painting and sculpture—as our architecture should be—*emphatically modern*, and I attacked the same points in men's costume that Mr. Gotch does, namely, the head and ankles; to these he adds the wrists. His suggestions are, in my humble opinion, excellent; but the edge of his wedge is not nearly thin enough—the transformation must be far more gradual and insidious in order to lead to any result. Neither do I believe that the discarding of linen shirts for jerseys, as he recommends, would find a welcome amongst English gentlemen. He cannot surely be dead to the ambrosial balm of a clean shirt, especially after an afternoon's exercise in his favourite flannels and jerseys. I have heard an answer attributed to Beau Brummel who, when asked what he considered the sweetest scent to use, replied "country-washed linen, and *plenty of it*." The mistake that we make is over-starching. Pity the sorrows of a poor young masher trying to look at his "button-hole" over the edge of his metallic gorget without the aid of a looking-glass! But we may still be clean, as well as comfortable, in linen, with less starch and more sensible forms in our collars and cuffs.

There is a great comfort in getting rid of the heavy coat sleeve when at work, and we might unobtrusively take a hint from a bygone fashion of arranging it to slip on and off with the help of a few buttons, which would be unnoticed until the fashion has redeveloped into a more pronounced form, such as was common in the fifteenth century, for instance. An equally gradual improvement might benefit our ankles, by our sewing on two or three buttons and button-holes, so as to tighten the trousers around our boots in muddy weather; this would be far less unsightly than turning them up and ruining them in the eyes of our tailors. I have heard someone sententiously pronounce "they are never the

trousers they were" after this horizontal creasing operation has been performed.

Now for our heads. And here I wish to be particularly polite to the mashers, who have succeeded in lowering the crown and widening the brim of our "chimney pots" to sensible proportions. I could not wear such a hat just now for the world, because it would not look professional. But, dear mashers! sweet mashers! elegant mashers! flowery potato mashers! *would* you make one *little* alteration in the outline of your crowns, and, instead of increasing in diameter upwards, let them diminish. A hat widening upwards requires a beard and flowing hair widening downwards to balance it; but as you don't let your hair grow like a picturesque Russian priest, you should not wear an overhanging crown like his.

Thanks to bicycling we have the pleasure—and a very sincere pleasure it is to me—of seeing muscular calves in action about our streets, but it will be a long time before a gentleman can be considered "dressed" when in his bicycling costume. Meanwhile I hope he may be freely admitted to appear on our buildings in the form of sculpture; and I believe that even the slight alterations that I have suggested for our heads, wrists, and ankles in *ordinary dress*, would admit of its being rendered in modern sculpture as well.

Your obedient servant,

EDWARD J. TARVER.

P.S.—The late Prince Consort once suggested the sloping crowned hat, a fashion which H.R.H. the Prince of Wales might therefore be pleased to adopt.

#### Fireproof Floors.

SIR,—As a subscriber I should be glad if any readers could give a description of the best method of forming fireproof floors between residential chambers, having due regard to the prevention of sound and to the conditions of the Metropolitan Building Act. Hitherto I have formed the same with rolled iron joists, about 2 to 3 feet apart, filled in with concrete, the under side being plastered for ceiling, the 4½ by 2 feet joists being laid the reverse way on the iron joists and covered with battens. This method does not prevent sound, however, as well as one would wish, and I fear cannot be considered fireproof.

Yours obediently,

C. H. W.

#### LEGAL.

##### Worcester County Court.

(Before Sir RUPERT KETTLE, Judge.)

HUGHES v. PORTER AND ANOTHER.

In this action the plaintiff, Mr. Frederick Hughes, of Bath Road, Worcester, architect, sought to recover the sum of 9*l*., the balance of an account alleged to be due from the defendants, Mr. S. Porter and Miss E. Askew, of Upper Park Street, Worcester. Mr. Halford (from the firm of Messrs. F. & H. Corbett) was for the plaintiff; Mr. Beauchamp appeared for the defendants. Only the female defendant appeared. Mr. Halford stated that one of the defendants, Samuel Porter, had formerly carried on business as a carpenter in Worcester, but disappeared some time ago. Porter and Miss Askew, jointly, called upon plaintiff to prepare plans for the building of a house, and now Miss Askew denied her liability. Plaintiff said that some time in March 1882, Porter and Miss Askew called upon him, and Miss Askew told him she wanted to build a house worth about 250*l*. on a piece of land belonging to her in Wild's Lane, and he knew that she had property there. He knew that Porter had no property. He had frequent interviews with the defendants about the house, and he prepared plans, which were put in. In reply to His Honour plaintiff admitted that he regarded Porter as Miss Askew's agent, but believed he was doing the work for Miss Askew. He admitted also that he had sent the plans in Porter's name, and a receipt bearing a signature for *id.* by Porter was put in. His Honour (to plaintiff): My sympathies are with you, but the law is against you. You will have to find Porter, then you can serve him. Judgment for Miss Askew.

##### Hammersmith Police Court.

##### DEFECTIVE BUILDING.

Mr. Browne, builder of six houses in Brackenbury Road, Hammersmith, was summoned before Mr. Shiel by the Metropolitan Board of Works for dangerous construction. Each house has on the ground floor a bay window; the opening in the wall admitting the bay window is eight feet wide, and is bridged over by a badly-constructed beam, which has deflected and fractured the brickwork resting on it.

Mr. Knightley, district surveyor, produced a model of the beam, a rubbing of the brickwork with a level line drawn upon it that the deflection might the more easily be understood; he also gave the deflection of each beam, and submitted a drawing showing the



proper manner of trussing a beam. The magistrate inquired if the brick on edge was a brestsummer, but upon being told that a brestsummer was made of wood not of bricks, he said he knew nothing about such things; the case must be referred to an architect. Mr. Roberts, representing the Metropolitan Board of Works, refused assent until instructed by his Board.

The Metropolitan Board of Works, having a large number of dangerous structure cases to deal with, and having no power to recover extraordinary expenses, objected on principle.

When the case came on again before Mr. Sheil, Mr. Reade, engineer, gave evidence as to the insecurity of the structures, the unequal power of the brestsummers to support the load, and was followed by Mr. Thomas, of the Metropolitan Board of Works' Dangerous Structures Department.

Two professional witnesses were called for the defendant. Both admitted they were not members of either Architects' or Engineers' Institutions, but had examined the buildings, and found nothing amiss; the brestsummers had deflected a quarter of an inch, and usually did so of their own weight—evidence which will surprise most constructionists. Mr. Sheil said he could not understand the question, so dismissed the summons. The interesting structures, therefore, are to remain.

## ART WORKMANSHIP.

**Stained Glass in Lerwick Town Hall.**—Messrs. James Ballantine & Son, Edinburgh, have nearly completed the commission with which they were intrusted for the filling in of several windows of the newly-erected town hall at Lerwick with-stained glass, illustrative of events in the history of the northern islands. The two principal windows, which are 13 feet in height, are ready for delivery, and will be placed in the south gable of the building. One of these is given by the Earl of Zetland, and the other by Sheriff Thoms. The former is in memory of "Harold the Fair-haired," and Jarl Rognvald, the first king and the first earl of Orkney. These ancient rulers are represented in nearly life-size, while underneath the figures are small groups illustrative of the landing of Harold in Shetland A.D. 870, and the investiture of the Earl of Orkney. The corresponding window, bestowed by Sheriff Thoms, shows the figures of Archbishop Eystein, of the ancient metropolitan see of Orkney and Shetland, and Bishop William the Old, the first bishop of the diocese. Underneath are representations of the consecration of King Magnus by the Archbishop, and the founding of St. Magnus Cathedral. At the top of the window are the arms of Norway and Thronhjelm.

**Huntington.**—A stained glass window has just been inserted in the chancel of Huntington Church. It is the gift of Mrs. Bennett, of Millcrooks, and is erected to the memory of her husband, the late Mr. James Bennett. The window is of two lights, and the subject is the Apostles Peter and Paul. The four archangels, distinguished by their emblems, fill the tracery above. The chancel now possesses three stained-glass windows, thus completing the work. The window has been executed from designs by Mr. D. A. Walter, architect, of Hull.

## GENERAL.

**Signor de Fabris**, the architect of the new front of the cathedral at Florence, died on June 28 at Florence, on the eve of the day appointed for uncovering his great work.

**The Society of Arts Conversazione** will take place on the evening of Wednesday, July 25, at the Fisheries Exhibition.

**Mr. Alma Tadema, R.A.**, and **Mr. Herkomer, A.R.A.**, are among the exhibitors at the International Art Exhibition, which was opened at Munich on Monday.

**The Rembrandt Society**, lately established at Amsterdam, has been formed for the purpose of purchasing paintings and drawings of the old Flemish and Dutch schools, when offered for sale either privately or at auctions, and so prevent their exportation to foreign countries, as has happened several times lately in Holland with respect to celebrated collections. The paintings thus secured for the country would be offered at moderate prices to Dutch museums and galleries. The Burgomaster of Amsterdam has promised his energetic co-operation with the society, which numbers some leading men among the merchants, artists, and connoisseurs of Holland.

**The Selection of a Site** in Canterbury Cathedral for the recumbent figure or altar-tomb which it is proposed to erect there as a national memorial of Archbishop Tait, has been made provisionally by Mr. Beresford-Hope, M.P., the Dean of Westminster, and the Rev. J. H. J. Ellison (one of the chaplains to the late Primate), who were accompanied by Mr. G. L. Scott, the architect, and Mr. Boehm, the sculptor engaged by the Executive Committee of the Memorial Fund. The site selected is immediately behind the archiepiscopal throne. The committee for the local memorial have decided on the erection of a sedilia.

**Mr. Charles R. Gribble** has been appointed architect to the Directors of the National Bank of England.

**The Sale of the Towneley Manuscripts** has realised a total sum of 4,054*l.* 4*s.* 6*d.*

**The Queen** by command has permitted the Institute of Painters in Water-colours to assume the title of "Royal," and is now to be styled the "Royal Institute of Painters in Water-colours."

**The Bristol and Gloucestershire Archæological Society** will hold their annual meeting at Bath on the 25th, 26th, and 27th, instead of, as originally intended, on the 31st and following days.

**An Anonymous Donor** has given 3,000*l.* towards the building of the permanent church of St. Alban the Martyr, Nottingham.

**The Cork Industrial Exhibition**, described as the best which has yet been held in Ireland, was opened on Tuesday by the Lieutenant of the county, Lord Bandon. An illustration of the exhibition buildings appeared in *The Architect* of June 16.

**Messrs. Carpenter & Ingelow**, architects, have made a report stating that the tower of Sherborne Minster is unsafe, and that it will be necessary to rebuild it.

**"The King's Gateway,"** by Mr. Briton Riviere, R.A., was sold by Messrs. Christie & Manson on Saturday for 1,270*l.* 10*s.*; and a picture, *The Rising of the Nile*, by Mr. F. Goodall, R.A., realised 1,197*l.*

**The Preamble** of the Manchester Ship Canal Bill has been proved, subject to conditions imposed on the promoters.

**Mr. Hebb**, assistant architect to the Metropolitan Board of Works, will be for a time relieved of all other work, so that he may give his whole time and attention to the metropolitan theatres and music-halls.

**The Sheffield Society of Local Artists** opened their ninth annual exhibition of works on Saturday last.

**The Emperor of Germany** has promised 12,500*l.* to found a hospital on the island of Norderney, in the German Ocean, if an equal sum be made up by private subscription.

**Manchester Cathedral.**—The demolition of the north gallery of the cathedral was begun on Wednesday. Before Sunday next it is expected that this never very slightly adjunct to the cathedral will be entirely cleared away, and steps will shortly be taken to carry out Mr. Crowther's plans for the erection of the new north porch, and other necessary alterations and restorations.

**A Panorama** of the battle of Tel-el-Kebir was opened on Wednesday at Westminster. Mons. Olivier Pichat is the artist.

**The Building Committee** of the Birmingham School Board intend to obtain plans for schools to accommodate 1,000 children on sites in Cowper Street and Stratford Road.

**The Electric Lighting of the Royal Courts of Justice** is considered to be a success. The central hall is illuminated by six Crompton arc lamps, each of 4,000-candle power, and the courts and corridors by Swan incandescent lamps. There are from 22 to 24 lamps in each of the twenty courts, and upwards of 20,000 yards of conducting wires are laid within the building.

**The Iron Roofing** for the new markets at Ebbw Vale has been placed in the hands of Mr. A. D. Dawney, Assoc. Inst. C.E., for execution. The roof for the Blaenau markets, recently opened, was constructed by the same firm. Mr. E. A. Johnson, of Abergavenny and London, is the architect for both markets.

**The Promenade Pier in Ramsgate**, which was constructed about a year ago at a cost of over 12,000*l.*, is to be sold by auction on Saturday next, the 14th inst., under a liquidation order.

**The Plans** for extensive alterations and additions to the Swansea Union Workhouse have been approved, and tenders will shortly be asked for. The estimated cost is 24,000*l.* Messrs. W. D. Blessley & Aspinall, of Cardiff, are the architects. The same firm have also prepared plans for an extension to the Bedwelty Union Workhouse, Tredegar.

**The Hove Commissioners** have decided to carry out forthwith the scheme prepared by Sir John Cooke for a sea wall and groynes for the defence of the lawns and foreshore of Hove, at a cost of about 25,000*l.*

**The Wednesbury Local Board** have decided to adopt surface drains and intercepting sewers to convey the sewage of the town and storm water combined to some spot hereafter to be selected, and there dealt with. It is estimated that the scheme will cost 30,000*l.* less than by a system of deep drainage.

**The Foundation-stone** of the Northumberland Avenue Hotel will be laid on Thursday, July 19. The hotel is being erected from the designs of Messrs. Isaacs & Florence, for the Northumberland Avenue Hotel Company. This hotel, it is believed, will be the largest and most commodious in Europe. The floors will be fire-proof, and there will be escape staircases from every floor. All the rooms will be well lighted and well furnished, and will be let at moderate charges, including the use of an unusually extensive suite of public rooms, having all the accommodations and comfort of a good club.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, JULY 7, 1883.

### COMPETITIONS OPEN.

**NEWCASTLE-ON-TYNE.**—July 30.—Designs are invited for a Hospital for Infectious Diseases to be built on a Site near Heaton Junction. Subject to certain conditions, the successful Architect will have the carrying out of the work, and a premium of 50% will be divided between the second and third competitors. Mr. Hill Motum, Town Clerk, Town Hall, Newcastle-on-Tyne.

### CONTRACTS OPEN.

**BERKHAMSTEAD.**—July 9.—For Building Tramp Wards at the Workhouse. Mr. William Huckvale, Architect, Tring.

**BIRMINGHAM.**—July 21.—For Building Liberal Club. Mr. J. A. Cossins, Architect, Warwick Chambers, Corporation Street, Birmingham.

**BLOXWICH.**—July 7.—For Erection of Public Buildings. Mr. F. E. F. Bailey, Architect, Walsall.

**BRIGHTON.**—July 12.—For Forming Garden Enclosures on South Side of Western Esplanade. Mr. P. C. Lockwood, Borough Surveyor, Town Hall, Brighton.

**BROMFIELD.**—July 7.—For Erection of Farm Buildings. Messrs. Pickering & Crompton, Architects, Whitehaven.

**CAMBRIDGE.**—July 16.—For Construction of a Building for the Enlargement of the Guildhall. Mr. Edmond Foster, Town Clerk, Guildhall, Cambridge.

**CANTERBURY.**—July 8.—For Additions to Barton Mill. Mr. J. G. Hall, 4 St. Margaret Street, Canterbury.

**DARLINGTON.**—July 12.—For Building Fifty-five Houses. Mr. William Hodgson, Architect, 1 North Terrace, Darlington.

**FYFIELD.**—July 10.—For Building Truants' Home for Eighty Boys. Mr. J. T. Newman, Architect, 2 Fen Court, E.C.

**GOOLE.**—July 12.—For Building Sailors' Institute and Dwelling-house. Mr. W. Alfred Gelder, Architect, 7 Saville Street, Hull.

**GORLESTON.**—July 12.—For Building Group of Schools with Boundary Walls, &c. Messrs. Bottle & Olley, Architects, Regent Street, Great Yarmouth.

**HEBDEN BRIDGE.**—July 14.—For Building Schools, Board Room, Caretaker's House, Boundary Walls, &c. Mr. John Sutcliffe, Architect, Romfield Buildings, Todmorden.

**MORLEY.**—July 11.—For Extension of Peel Street School. Mr. J. Sykes, Architect, Queen Street, Morley.

**SEELY OAK.**—July 9.—For Repairs to Workhouse. Mr. George Ingall, Architect, Temple Row West, Birmingham.

**THORNTON-IN-CRAVEN.**—July 9.—For Restoration of Church. Messrs. Waddington & Son, Architects, 5 Grimshawe Street, Burnley.

### TENDERS.

#### ATHERSTONE.

For Additions to Drawing-room, &c., Sheepy Hall, Atherstone, for Mr. C. B. Love, J.P. Mr. WILLIAM TOMLINSON, Architect, Coventry.

Fox Bros. . . . . £372 0 0

Allow for old materials . . . . . 21 0 0

Total . . . . . £351 0 0

Shilton, Stoke Golding . . . . . £340 0 0

Allow for old materials . . . . . 18 0 0

Total . . . . . £322 0 0

Shilton, for conservatory, not including heating and-stands, &c. &c. . . . . £115 0 0

#### BLAINA.

For New Board School for 1,200 Children, including Out-buildings and Master's House and Board Room, Blaina, Mon. Messrs. W. D. BLESSLEY & ASPINALL, Architects, Cardiff.

JENKINS, Brynmawr (accepted) . . . . . £8,495 11 0

#### ACCRINGTON.

For (Contract No. 2) the Construction of 3 feet 6 inches by 2 feet 4 inches Brick Sewer in Hyndburn Road, Union Street, Blackburn Road, and Abbey Street; for 3-foot Brick Overflow and 15-inch Pipe Sewer in Blackburn Road; for 18-inch and 15-inch Pipe Sewers in Abbey Street and Manchester Road, with Man-holes, Lampholes, &c., for Accrington. Mr. E. KNOWLES, Borough Engineer.

Hunter . . . . . £2,283 0 0

Rambottom . . . . . 1,940 0 0

SHARPLES (accepted) . . . . . 1,887 0 0

For Main Sewerage Works (Contract No. 3), Accrington.

Rambottom . . . . . £1,800 0 0

Sharple . . . . . 1,725 12 0

HUNTER (accepted) . . . . . 1,888 0 0

#### BIRKENHEAD.

For Erection of Boundary Walling and Ornamental Cast-iron Railings, &c., for inclosing the Unenclosed portion of the Tranmere Recreation Ground, Birkenhead.

Wright, Birkenhead . . . . . £2,005 6 0

Child & Hewitt, Liverpool . . . . . 1,934 0 0

Croft Brothers, Birkenhead . . . . . 1,831 0 0

SMITH & Co., Whitechurch (accepted) . . . . . 1,550 6 0

For Supplying and Fixing Wrought-iron Fencing for Inclosing the Building Land adjoining the Tranmere Recreation Ground, Birkenhead.

Sharple, Birkenhead . . . . . £504 17 0

Jones, Leacombe . . . . . 534 19 0

Alletson, Rochdale . . . . . 505 14 0

Child & Hewitt, Liverpool . . . . . 493 0 0

Johnson Bros & Co., London . . . . . 489 10 0

Baylis, Jones & Baylis, Wolverhampton . . . . . 479 2 0

Hides & Wigfall, Sheffield . . . . . 460 10 0

Morton & Co., Liverpool . . . . . 449 6 0

Riding & Sons, Bury . . . . . 439 0 0

Middleton, Kendal . . . . . 436 3 0

Appleton, Bristol . . . . . 430 10 0

Furnival, Birkenhead . . . . . 424 4 0

Simpson, Wood & Co., Denlston . . . . . 410 4 0

Hill & Smith, Brierley Hill . . . . . 400 6 0

SMITH & Co., Whitechurch (accepted) . . . . . 399 18 0

#### BLACKBURN.

For the Erection of Two Semi-detached Villas, for Messrs. Forrest & Crabtree, Wilpshire, near Blackburn. Mr. JAMES BERTWISTLE, Architect, Blackburn. Quantities by the Architect.

Accepted Tenders.

Duerden, masonry and brickwork . . . . . £971 1 0

Ibbotson, joiner and carpenter . . . . . 537 0 0

Chadburn, plumbing and glazing . . . . . 164 0 0

Cook, plastering . . . . . 104 3 0

Pickings, painting . . . . . 29 0 0

Slatting and tiling by the proprietors.

#### CARMARTHEN.

For Rebuilding Peniel Congregational Chapel, Carmarthen. Mr. GEORGE MORGAN, Architect, Carmarthen. Quantities not supplied.

Morgan, Carmarthen . . . . . £935 10 0

Jones & Lloyd, Carmarthen . . . . . 898 0 0

PHILLIPS, Llanelly (accepted) . . . . . 876 0 0

Brown, Thomas, & Johns, Llanelly (mason and plasterer's work not included) . . . . . 686 10 0

#### CHICHESTER.

For Laying Boarded Floor in the Sample-room of the Corn Exchange, Chichester. Mr. G. C. INKTON, Architect.

Budden, Chichester . . . . . £215 0 0

Gambling, Chichester . . . . . 210 0 0

Saewin, Littlehampton . . . . . 195 0 0

Rogers, Chichester . . . . . 195 0 0

Irish, Lavant . . . . . 185 0 0

JOHNSTONE, Chichester (accepted) . . . . . 182 0 0

#### CRICCIETH.

For Building Sea Wall of Concrete, forming portion of projected Improvements on the Foreshore, Criccieth. Mr. G. L. FULLER, C.E.

Hughes & Humphrys, Portmadoc . . . . . £4,062 10 0

Griffiths, Criccieth . . . . . 3,750 0 0

Morris, Carnarvon . . . . . 3,356 5 0

Griffiths, Menai Bridge . . . . . 3,853 6 8

Jones, Groeslon . . . . . 3,326 12 3

Jones, Criccieth . . . . . 3,212 10 0

Owen, Portmadoc . . . . . 3,133 6 8

Davies Bros., Wrexham . . . . . 2,472 18 4

Jones, Bettws-y-coed . . . . . 2,256 5 0

Bugbird, Carnarvon . . . . . 2,090 10 0

MATHEWS, Stockport (accepted) . . . . . 1,676 0 0

#### COCKERMOUTH.

For Erection of Grapes Inn, Kirkgate, Cocker-mouth. Mr. R. S. MARSH, Surveyor.

Mason, plasterer, joiner, plumber, and painter work.

Banks . . . . . £129 10 0

Cooper . . . . . 112 11 0

Crone & Co. . . . . 111 8 9

J. BORROWSALE . . . . . 82 10 0

J. BORROWSALE (amended tender) . . . . . 53 0 0

\* Accepted tender, after dispensing with a portion of the work.

#### FENTON.

For Construction of Pipe Sewers, &c., Fenton. Mr. S. A. GOODALL, Surveyor. Quantities by the Surveyor.

Curral & Lewes, Birmingham . . . . . £7,540 0 0

G. & I. E. Read, Burnley . . . . . 7,234 16 0

Harris & Jenkins, Great Harwood . . . . . 6,333 18 3

Rayner, Bootle . . . . . 6,330 0 0

Young, James & Co., Woolston . . . . . 6,297 0 0

Palmer, Burningham . . . . . 6,280 10 0

Thorne, Newcastle . . . . . 6,134 10 6

Anwell, Liverpool . . . . . 6,053 0 0

Biggs, Handsworth . . . . . 5,666 10 0

Bromage, Stoke-on-Trent . . . . . 5,645 0 0

Mackay, Stoke-on-Trent . . . . . 5,456 2 0

Dovener, Sowerby Bridge . . . . . 5,145 12 4

Forsyth, Fenton . . . . . 5,141 11 11

Smith, Stoke-on Trent . . . . . 4,995 9 0

Turner & Sons, Heywood . . . . . 4,850 16 10

DREWITT, Alsager (accepted) . . . . . 4,658 0 0

#### FOREST HILL.

For the Erection of St. Paul's Vicarage, Forest Hill, for the Rev. Frank Jones. Messrs. H. D. APPLETON & E. W. MOUNTFORD, Joint Architects.

Howard & Dorrell . . . . . £1,846 0 0

Humphreys . . . . . 1,700 0 0

Turtle & Appleton . . . . . 1,465 0 0

ROBINSON, Lower Tooting (accepted) . . . . . 1,370 0 0

#### GUILDFORD.

For the Erection of New School Buildings, North Street, Guildford, for the Building Committee of the Congregational Church. Messrs. PEAK, LUNN & PEAK, Architects and Surveyors. Quantities supplied by Architects.

Amount. Deduct for old materials.

Huckle, Norbiton . . . . . £3,932 10 0

Swain, London . . . . . 3,633 0 0 £20 0 0

Pink, Milford . . . . . 3,544 0 0 47 0 0

Goddard & Sons, Farnham . . . . . 3,495 0 0 30 0 0

Strudwick, Guildford . . . . . 3,490 10 0 25 0 0

Martin, Wells & Co., Aldershot . . . . . 3,350 0 0 50 0 0

Dunford, Poole . . . . . 3,370 0 0 100 0 0

Mitchell Bros., Shalford . . . . . 3,267 0 0 45 0 0

Garland, Aldershot . . . . . 3,249 0 0 70 0 0

KINGERLEE, Banbury (accepted) . . . . . 3,175 0 0 100 0 0

For Repairs and Painting to Exterior of House, Commercial Road, Guildford. Messrs. PEAK, LUNN & PEAK, Surveyors.

Edmead & Son, Guildford . . . . . £34 5 6

Furlong, Guildford . . . . . 33 9 3

#### HALIFAX.

For Pulling Down and Rebuilding Shop and Office, Lord Street, Halifax. Mr. C. F. L. HORSFALL, Architect. Quantities by the Architect.

Drake & Riley, mason . . . . . £270 0 0

Wadsworth & Sons, joiner . . . . . 110 0 0

Rushworth & Frith, plasterer . . . . . 26 0 0

Stafford, plumber . . . . . 50 0 0

Dyson, ironwork . . . . . 35 0 0

Shutters, painting, fixtures, &c. . . . . 500 0 0

Total . . . . . £200 0 0

Total . . . . . £700 0

#### HONOR OAK.

For the Construction of Roadway, Footpaths, and Laying in Pipe Sewers, &c., on the Honor Oak Park Estate, for Mr. E. P. Trenchard. Mr. HERBERT D. APPLETON, A.R.I.B.A., the Wool Exchange, E.C., Architect and Surveyor.

FELTON, Kilburn (accepted).

Road, £1,057; Curbing, £231; Side Drains, £170.

#### KETTERING.

For the Removal of Warkton Bridge, Kettering. Mr. D. VESSEY, Surveyor.

Bindley & Patrick . . . . . £105 5 0

MANBY (accepted) . . . . . 106 0 0



## LINCOLN.

For Conversion of Two Dwelling-houses, Baggeholme Road, into a Branch Store for the Lincoln Equitable Co-operative Society. Mr. W. MORTIMER, Architect, Lincoln.

Cliffe . . . . .	£207	5	0
Layton . . . . .	182	0	0
HARRISON (accepted) . . . . .	176	0	0
Architect's estimate . . . . .	190	0	0

## LIVERPOOL.

For the Erection of House for Superintendent and other Buildings in Sefton Park, Liverpool.

Jones & Sons . . . . .	£3,200	0	0
Raffie & Campbell . . . . .	3,077	0	0
Porter . . . . .	3,036	0	0
Lawrenson . . . . .	2,997	0	0
Makinson & Glover . . . . .	2,988	0	0
Kates . . . . .	2,975	0	0
Tyson . . . . .	2,935	0	0
Morrison & Sons . . . . .	2,926	0	0
Black & Toul . . . . .	2,905	0	0
Brown & Backhouse . . . . .	2,869	0	0
Tomkinson & Sons . . . . .	2,847	0	0
Jones & Co. . . . .	2,786	0	0
Tomkinson & Co. . . . .	2,750	0	0
STANANOGHT (accepted) . . . . .	2,575	0	0

## LLANDUDNO.

For Cloverly Lodge, Llandudno. Mr. B. NELSON, Architect. Quantities by the Architect.

Accepted Tenders.  
Gradwell & Co., Barrow-in-Furness.  
Roberts, Llandudno.  
Prichard & Williams, Llandudno.  
Total, £272.

## LLANRWST.

For Division of Parish Road, Llanddoyet Estate, Llanrwst. Mr. B. NELSON, Surveyor. Quantities supplied.

Griffiths, Llanrwst . . . . .	£730	0	0
E. Jones, Bettws-y-Coed . . . . .	645	0	0
J. B. Jones, Llanrwst . . . . .	610	0	0
BROOKES, Llandudno (accepted) . . . . .	470	0	0

## LONDON.

For Rebuilding Hatchett's Hotel and White Horse Cellars, Piccadilly. Contract No. 1. Messrs. W. S. WEATHERLEY and F. E. JONES, Architects. Quantities supplied.

	Bath.	Ancaster.
Mowlem . . . . .	£24,400	0 0
Manley . . . . .	23,990	0 0
Ansell . . . . .	23,570	0 0
Macey . . . . .	23,335	0 0
Boyce . . . . .	23,266	0 0
Brass . . . . .	23,239	0 0
McLachlan . . . . .	23,032	0 0
Rider . . . . .	22,950	0 0
Colls . . . . .	22,785	0 0
Shaw . . . . .	22,626	0 0
Chappell . . . . .	22,570	0 0
Grover . . . . .	21,848	0 0
Higgs & Hill . . . . .	21,604	0 0
	£25,000	0 0

For Winchester House, City, for Mr. John Pender, M.P. Mr. F. T. PILKINGTON, Architect.

Devlin, Glasgow . . . . .	£116,938	15	8
Conger . . . . .	113,890	0	0
Ashby Bros. . . . .	111,587	0	0
Thompson, Peterborough . . . . .	108,970	0	0
Higgs & Hill . . . . .	104,400	0	0
McGregor . . . . .	101,538	0	0
Dove Bros. . . . .	100,675	0	0
Ashby & Horner . . . . .	100,388	0	0
Perry & Co. . . . .	99,890	0	0
Bywaters . . . . .	99,874	0	0
Boyce . . . . .	99,700	0	0
Booth Bros. . . . .	99,140	0	0
Lovett, Wolverhampton . . . . .	99,332	0	0
Brass . . . . .	97,657	0	0
Trollope & Sons . . . . .	96,365	0	0
Chappell . . . . .	95,890	0	0
Mowlem . . . . .	92,901	0	0
Laing, Dundee . . . . .	91,061	0	0

For the Erection of the National Hospital for the Paralyzed and Epileptic, Queen's Square, Bloomsbury, W.C. Messrs. MANING & SIMPSON, Architects, 6 Mitre Court Chambers, Temple, E.C. Quantities by Mr. D. J. Brown, 61 Lincoln's Inn Fields, W.C.

Green . . . . .	£42,145	0	0
Wontner, Smith & Son . . . . .	40,888	0	0
J. Beale . . . . .	40,875	0	0
Kirk & Randall . . . . .	40,742	0	0
Hobson . . . . .	40,650	0	0
Longmire & Burge . . . . .	40,495	0	0
Manley . . . . .	40,464	0	0
Downs . . . . .	40,354	0	0
Thorn . . . . .	40,200	0	0
Simpson & Son . . . . .	40,000	0	0
Howard & Dorrell . . . . .	39,990	0	0
Macey & Son . . . . .	39,900	0	0
Wall Bros. . . . .	39,580	0	0
Brass . . . . .	39,500	0	0
Peto Bros. . . . .	39,439	0	0
Rider & Sons . . . . .	39,379	0	0
G. H. & A. Bywaters . . . . .	39,363	0	0
J. W. Beale . . . . .	39,346	0	0
Mowlem & Co. . . . .	39,300	0	0
Higgs & Hill . . . . .	39,284	0	0
Ashby Bros. . . . .	38,654	0	0
Chappell (accepted) . . . . .	37,970	0	0
Merritt & Ashby . . . . .	37,770	0	0

For Additions and Alterations to Swimming Bath, Davies Street, for the Commissioners of Public Baths and Washhouses, St. George's, Hanover Square. Mr. J. C. MANN, Architect, 29 St. George's Street, Westminster. Quantities by the Architect.

Reading . . . . .	£5,018	0	0
Scott . . . . .	4,900	0	0
Chapple . . . . .	4,725	0	0
Cuske . . . . .	4,667	0	0
Young & Co. . . . .	4,563	0	0
Lye . . . . .	3,663	0	0

## REDHILL.

For Building St. Anne's School, Redhill. Messrs. G. R. CRICKMAY & SON, Architects. Quantities supplied by Mr. R. Roberts.

Names	A			B			C			D			Total		
	Foundations of Main Block to Ground-floor Level			Main Building above this, including Master's House and Lodge			Infirmary, Laundry, Bath, and Out-houses			Chapel					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Chappell . . . . .	4,445	0	0	28,183	0	0	7,147	0	0	4,305	0	0	44,080	0	0
Candler . . . . .	3,721	0	0	28,570	0	0	7,244	0	0	4,000	0	0	43,535	0	0
Grimwood & Sons . . . . .	3,678	0	0	28,040	0	0	6,815	0	0	3,961	0	0	42,494	0	0
Bangs & Co. . . . .	3,879	0	0	26,292	0	0	6,870	0	0	4,100	0	0	41,141	0	0
Lovatt . . . . .	3,504	0	0	26,069	0	0	7,065	0	0	3,683	0	0	40,271	0	0
Wall Bros. . . . .	4,087	0	0	25,633	0	0	6,391	0	0	3,839	0	0	39,900	0	0
Perry & Co. . . . .	3,600	0	0	25,555	0	0	6,285	0	0	3,810	0	0	39,250	0	0
Booth Bros. . . . .	3,550	0	0	25,600	0	0	6,230	0	0	3,800	0	0	39,130	0	0
Patman & Fotheringham . . . . .	3,400	0	0	25,500	0	0	6,200	0	0	3,700	0	0	38,800	0	0
Nightingale . . . . .	3,610	0	0	25,093	0	0	6,286	0	0	3,708	0	0	38,697	0	0
Parnell & Sons . . . . .	3,430	0	0	25,189	0	0	6,129	0	0	3,648	0	0	38,396	0	0
Peto Bros. . . . .	4,019	0	0	24,250	0	0	5,944	0	0	3,745	0	0	37,958	0	0
Vernon, Ewens & Co. . . . .	3,903	15	3	23,978	0	10	6,183	16	3	3,822	7	8	37,888	0	0
Kirk & Randall . . . . .	3,269	0	0	24,135	0	0	5,866	0	0	3,580	0	0	36,850	0	0
Lawrence . . . . .	3,025	0	0	23,432	0	0	5,786	0	0	3,525	0	0	35,768	0	0

## LONDON—continued.

For the Erection of Residential Chambers at the corner of Old Brompton Road and Gloucester Road, South Kensington. Mr. W. H. COLLBRAN, Architect, 94 Gloucester Road, S.W.

Conger . . . . .	£14,500	0	0
Huey . . . . .	14,221	0	0
Boyce . . . . .	14,200	0	0
Martin, Wells & Co. . . . .	14,200	0	0
Perry & Co. . . . .	13,500	0	0
Nightingale . . . . .	12,009	0	0
Smith . . . . .	11,975	0	0
Toten & Sons . . . . .	11,975	0	0
Stimpson & Co. . . . .	11,470	0	0

For Superstructure of a Warehouse on the site of Messrs. Townsend's Premises, London Wall, E.C. Messrs. R. L. CURTIS & SONS, Surveyors.

Williams . . . . .	£9,150	0	0
Conger . . . . .	8,694	0	0
Lark & Son . . . . .	8,670	0	0
Morter . . . . .	8,290	0	0

For Pulling Down Stables and Coach-house, and Building Dwelling Offices and Business Premises for Mr. W. Crogan, at 125 Piccadilly, W. Mr. J. T. WIMPERIS, F.R.I.B.A., Architect.

Verrall & Griffith . . . . .	£1,678	0	0
Clark & Mannoch . . . . .	1,597	0	0
Lea . . . . .	1,560	0	0
Boyce . . . . .	1,541	0	0
Brass . . . . .	1,495	0	0
Fish, Prestige & Co. . . . .	1,439	0	0
Bywaters . . . . .	1,445	0	0
Scrivener & Co. . . . .	1,393	0	0

For Rebuilding the Princess Alice public-house, Commercial Street, E., for Messrs. Truman, Hanbury & Buxton. Mr. BRUCE J. CAPELL, Architect.

J. & H. Cocks . . . . .	£4,586	0	0
Staines . . . . .	4,484	0	0
Marr . . . . .	4,370	0	0
Anley . . . . .	4,300	0	0
SHURMUR (accepted) . . . . .	4,167	0	0

For Forming and Paving New Roads for the Lewisham District Board of Works.

WOODHAM & FRY (accepted) . . . . .	£759	0	0
WOODHAM & FRY (accepted) . . . . .	373	0	0

For Alterations and Repairs at the Dyers' Almshouses. Mr. WM. WAYMOUTH, Architect.

SHURMUR (accepted).

## MAIDSTONE.

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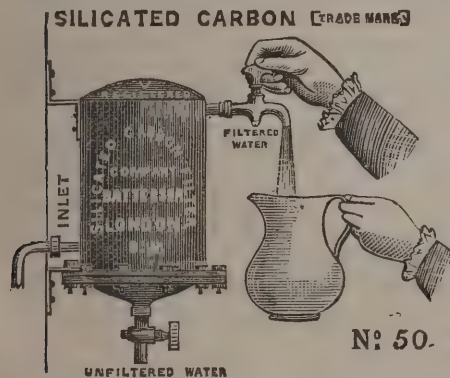
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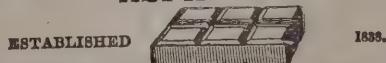
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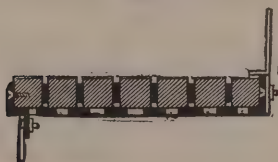


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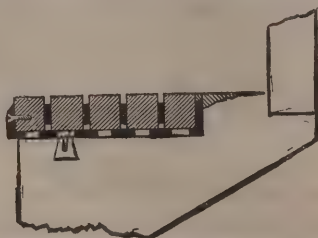
# LINDSAY'S IMPROVED PATENT REVERSIBLE TREADS & LANDINGS FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



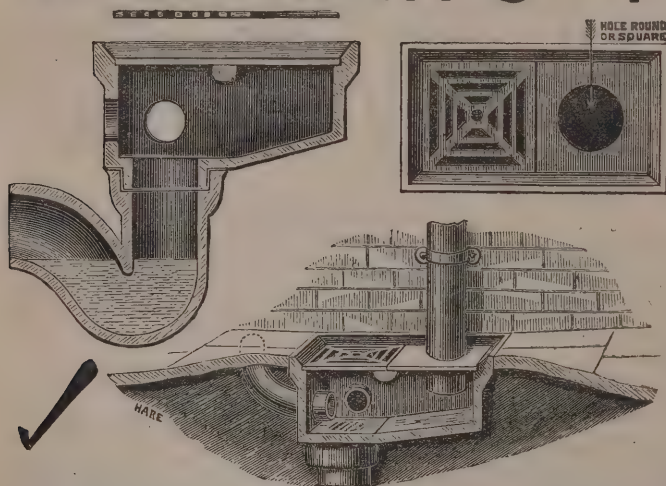
In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass block can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## LADYLIKE ART.



**L**F the reflections we made bold to offer last week upon Gentlemanlike Art have been found to contain in any degree the element of good sense, our readers will not be likely to object to a continuation of the discourse on similar lines in the form of some remarks upon the subject of Ladylike Art. At any time, and under any circumstances, the treatment of artistic work by the feminine instinct and the feminine hand must be regarded as a most interesting question, whether considered philosophically or practically; but we will take leave to say that in English art work at the present day there is something in the part taken by women which is more than usually worthy of the most favourable attention.

Amongst well-known aphorisms there is one to the effect that women are born actresses. It would probably be more true to say—perhaps as a better way of expressing almost the same idea—that women are born artists. So simple a fact is this, and so readily recognisable, that it is not at all a difficult task to maintain the proposition broadly that all art is of a sort of feminine gender; as if one should say masculine science, feminine art; masculine strength, feminine finesse; masculine power, feminine grace. Illustrations are, indeed, so common that it is almost a superfluity to speak of them. The aptitude for self-adornment as a thing to live for, the delight in daintiness from the very cradle of infancy, the irrepressible love of all that is beautiful, the delicacy of touch in every kind of handiwork, the gentle, sentimental feeling for all poetic things, are instincts of the sex, not attributes of the individual. A few women (some of us are ungallant enough to say the fewer the better) may have in them the stuff that physicians are made of, politicians, preachers, philosophers; but there are few indeed who, except it be by accident, are incapable of becoming musicians, dancers, decorators, milliners of course, and dreamers generally of all sorts of dreams that are pretty and refined. Perceiving this, as we all must do, if there be not something about feminine art that turns out to be peculiarly charming because of the very femininity of it, then ought we to be signally disappointed somehow.

But it need scarcely be said in so many words that in the whole history of art the place of the female artist has always been an honourable one. So much is this so, that in painting and in sculpture, in poetry and in musical composition, women have been in all ages the welcome rivals of the best of men. To exaggerate their merits in the express direction of manliness is as undesirable here as it is in all else; but it is even still more especially unnecessary; for although, in some instances, as exceptions, a vigorous masculinity has been strikingly exhibited, yet in all cases the more natural characteristics of delicacy and daintiness have been sufficient to mark out for female artists a province which they could hold as their own, and which many of them have so held amidst the applause of all the world. Descending, however (if we may so say), from those higher eminences of art which are occupied by the few, to the more level ground which affords a firmer foothold for the many, how can it be questioned that the fine tact and versatile temperament of a woman must enable her to produce, both in design and in execution, something so graceful, as compared with the parallel work of a man, that its very deficiency in vigour shall be but a part of its characteristic elegance? Take, for instance, the work we see in London just now in such departments of art as flower-painting, china-painting, and needlework, and those of the harder sex who may be disposed to take credit for gallantry when they treat the generality of feminine Academy pictures with toleration, and even to disallow gallantry itself to disguise their opinion of feminine novels, and perhaps feminine poems, will not be able on any terms to persuade themselves that these so-called minor efforts are of minor merit, or the graces that are peculiar to them of less practical value to society. And if we descend (so to speak again) still further to those devices of dress which occupy so considerable a share of the

attention of the sex, and are frank enough to acknowledge that this devising of female attire is in sober fact the earliest and most continuous of all the arts of the beautiful in point of history, infinitely the most universal in its application over the whole surface of the globe, and in one sense the most varied, while in another the most unvarying of all the endeavours of human ingenuity, there can be no possible difficulty in discerning how essential an element in the construction of the female intelligence is the disposition to deal with the beautiful for its own sake and for the sake of its own joys. In short, without introducing into our argument any form of speculation as regards the origin or the cause of the intellectual difference between the typical man and the typical woman, it is too plain to be matter for debate that the mental constitution of the woman, as regards the entire province of elegant design, is just as different from that of the man as are her fingers daintily and delicately different from his.

What, then, are the particular fields of artistic work which women ought to be encouraged to cultivate? To those philosophers who are content to think that, because a man has a brain and a woman has a brain, therefore the brain of man and that of woman are obviously the same brain, like two triangles that are equal and similar, and, in fact, the same triangle, the answer is easy but wrong. The right answer seems to be that in the increasing division of labour, in art as in all else, the future function of the female artist will probably apply to those kinds of work in all branches which are the more delicate and graceful, the less imposing, the less formidable, certainly the less scientific and the less mathematical. The remarkable weakness, for instance, of the female hand and eye in respect of accurate geometry, even in dressmaking, is a point which we need only hint at in the vaguest manner, and leave to the tailors to explain if they will; but, on the other hand, what tailor would presume to build a bonnet, or what human being of the tailor's sex in all the world would assume the responsibility of decking it with flowers? Possibly we might say, if allowed to be so irreverently figurative, that woman is the milliner of art and man the tailor.

But there is another question which we have to raise. In speaking of Gentlemanlike Art, it was made clear enough that the difference between the art of a well-bred man and that of an ill-bred man is a real difference in favour of good breeding. Is there any equal or corresponding difference in the case of female artists? We hold that there is a corresponding difference, but not an equal difference. The reason of this distinction is that the art of a rough man is rough art, while the art of a rough woman involves a sort of contradiction in terms. That is to say, the woman who becomes an artist, within the meaning to which the word is usually restricted, can scarcely be rough, as no doubt many a sound artistic spirit of the other sex may be and is. Therefore, although there must be, in women as in men, a whole infinite range of gradations between the most refined and the least, yet, with exceptions of course, no feminine work worthy of the name will ever be rude, or altogether crude, or in any sense coarse or graceless. Now, inasmuch as the gentleman is really possessed by gentleness as the basis of his character, so the lady is possessed by a similar gentleness as the basis of hers. To make this a matter of dispute in either case would only be to play upon words. We may consequently venture to lay it down as a principle that Ladylike Art is so far of the same order as ladylike behaviour, the value of which every one can appreciate. Whether, in the article of bonnets, for example, the refined manners of the artist are found to produce a refined arrangement of the ribbons, flowers, lace, and other paraphernalia, and a refined adjustment of the whole air of the thing to suit the style of the wearer, far be it from us to pretend to know of our own knowledge; but we are credibly informed that what may respectfully be called a vulgar hand, as a rule, turns out a vulgar article. Now, if this is the case in a species of art which is (if we may say so without giving offence) pretty and popular and that is all, is it not reasonable to conclude that, as we ascend the intellectual scale of artistic merit, the superiority of intellectual power—of the feminine kind—will be more and more apparent, and therefore that good breeding, which in a woman is specially akin to intellect, must clearly manifest itself in the higher efforts of design, and in the higher efforts of execution also?

The practical conclusion at which we arrive need be no more than this: That the encouragement which is now being given on all hands to women of cultivated mind and refined



manners to take part in the artistic work of England is good policy, whether regarded as personal or national. As an artist of any kind, a ladylike woman is at least in her right place ; as an artist of the right kind she ought to be supreme.

## STUDIES OF SOME LONDON CHURCHES.

[BY A CORRESPONDENT.]

AT length the writer takes up his pen after a long interval\* and resumes the above subject, having been prevented, owing to more pressing occupations, from sooner putting the "Studies" into literary shape. Yet it is hoped his observations will not lose by this, and should alterations have since been made to any of the buildings described, this essay ought, at least, to have historic interest.

It will soon become a very difficult task for an architect to examine all the new churches, as the circumference of London gets larger and larger year by year. His peregrinations in the limits of the "City" itself, however, will be reduced, as notwithstanding the exertions of that most careful body (one that, alas ! should have been formed much earlier, before ruthless modern vandals had swooped down on first one, then another, interesting fane) the City Church and Churchyard Protection Society, some historic structure is almost annually razed to the ground. But in these times it is, unfortunately, not only City churches that are threatened, but any one that is supposed to block up a vista, or, by some stretch of the imagination, declared to be "in the way." For example, St. Clement Danes, Strand, has by some people been doomed, because it is considered to interfere with the access to the New Law Courts, and to spoil the view of the latter as one comes along the Strand. In the writer's humble opinion one of the most picturesque prospects in London on a fine sunny day is from the "knifeboard" of an omnibus going eastwards as the slight winding of the Strand gradually reveals the elegant St. Mary-le-Strand, at first appearing almost to block the thoroughfare, and then a little further on its scarcely less elegant companion St. Clement Danes, while the lofty and beautiful *flèche* on the great central hall of the Law Courts towers up in the distance. It may be remarked *en passant* how much more picturesque such streets are than the interminable Parisian boulevards, and how effective and artistic fine buildings standing in such a position as this are.

Go a little further eastwards past the majestic Palace of Justice, and commencing to descend Fleet Street, the grand outline of St. Paul's looms conspicuously in the background, seeming to bar all progress beyond the narrow defile of Ludgate Hill. Even at the risk of being considered an opposer of all progress, the writer cannot but think that when Ludgate Hill is widened, as is settled, and more of St. Paul's seen, some of the present effect will be lost. Not that such a manifest improvement should not be carried out, far from it, for we are bound to move with the exigencies of the times. If, when this was done, a good granite or solid stone viaduct to replace the Chatham and Dover Railway Company's pretentious iron structure was built, the cathedral, of which we are so proud, would not so much suffer by the alteration of its western approach. Situation is a very important element as affecting the external effect of churches. How many a building one can call to mind, the aspect of which has been well nigh ruined by a bad site and awkward surroundings. St. Martin-in-the-Fields is an example of a church admirably adapted to its surroundings, and in a noble position. The interior is so well known that the writer need not comment on it, except to remark that it is unfortunate the galleries form no constructional feature of the church, being merely "scribed" to the piers. There is no doubt the fine proportions of the building would be better displayed were the galleries removed. But as externally provision has clearly been made for them by two ranges of windows, the *raison d'être* of such design would in that event be abolished. But there is no likelihood of the galleries being molested, particularly as the neighbourhood is to some extent a residential one.

As in the previous "Studies," it is not the intention of the writer to describe very methodically the churches commented upon, but rather to touch upon each in such a fashion as to bring out a few of the salient points. Sometimes the contem-

plation of a single detail in a church may call up a train of reminiscences of features in other buildings *à propos* to it. To follow them out may not be unprofitable, bearing in mind that relevancy has to be considered. One of the delights of travel to an architect who has a fairly retentive memory, is that the precious stones of experience and observation, picked up in many a pleasant trip, are sure to more than realise their value years and years afterwards, if judiciously selected and recut to advantage. No change in marketable rate will affect them ; they will always have their intrinsic worth, whether in the shape of sketches or written notes, or of impressions on the brain.

Let the reader proceed to the *Church of St. Anne*, South Lambeth, and he will see there a successful transformation of a very unecclesiastical-looking "Georgian" edifice. This has been so much recast and altered as to appear almost to have been rebuilt in a kind of Romanesque style. It is a real pleasure to see a most uninteresting-looking structure (formerly South Lambeth Chapel, consecrated in 1869), not metamorphosed into a churchlike building, with a chancel added. The treatment of the internal splay to the windows—a point which should be more looked after than it often is—is very natural ; a  $4\frac{1}{2}$ -inch plastered reveal, then the splay, so as to avoid cutting the bricks more than can be helped. But the sudden transition from this splayed reveal to the square order above the springing line of the rear arch is not very successful ; a more gradual change would have been better. The manner also in which the corbelling out to the shaft of the chancel arch a little way down the springing line is managed is crude. The corbel should either have been made a distinct feature or abolished altogether. It is in these little refinements that the real difficulty of design lies, and nothing but intuitive perception or long practice and experience can produce the desired result. Perhaps there is no single feature in a building which is a truer test of a good eye for proportion, and the skilful hand of the artist, than a gable-cross or the weathercock to a spire. These features stand conspicuously backed by the skies, and, if they are not successful, the remaining details rarely are so. In the glazing to the windows of St. Anne's, the horizontal joints in the square quarries and those to the borders are continued through in a line. It would be better for appearance, certainly, if the joints had been broken.

It is a pleasing surprise, after traversing the dingy Blackfriars Road, to come upon a well-cared-for interior like that of *Christ Church*, Southwark, for the ugly exterior, destitute of any architectural character, built of dull brick, begrimed with London smoke, and guiltless of any freestone dressings, little prepares one. Perhaps it is as well, for in how many notable churches—particularly continental ones—does the uninteresting external shell cover a charming kernel, which, after all, is the most important part of the church. The same remark holds good as regards many a quiet little English village church, where the trouble the traveller experiences in getting the keys, in no wise daunted by the unpromising exterior, is amply rewarded. In designing new churches, whether in towns or in the country, it appears to the writer that it is wise to adopt the happy mean, a not too ornamental exterior, but certainly not ugly, and to reserve for the worshippers in the earthly presence-chamber of the Most High the better part of the ornamentation. In 1870 a semicircular apse was added to Christ Church, and the choir seat arrangement brought forward into the nave. Though galleries exist both at the west end and north and south sides, the building is divided into nave and aisles by piers square in plan, with moulded capitals and bases, carrying semicircular arches, all well executed in wood. The piers stand clear of the galleries. The nave has tie-beams and a semicircular barrel-plastered ceiling. The walls and ceiling are coloured in a harmonious and effective manner, but the angles in the spandrels of the nave arches are not very happily conceived. On the responds of the chancel arch are representations—on the north side, of St. MARY MAGDALENE and other female saints ; on the south, St. STEPHEN, St. GEORGE, and others. Around the lower part of the apse walls are ranged in couples figures of the Apostles, surrounded by an architecturally-painted framework. As the apse windows are also filled with painted glass, the effect of the chancel is rich.

In the *Church of St. Andrew*, Stamford Street, there is no structural division or arch between the nave and chancel, the roof being continuous. But the arcades are rather differently treated ; there are narrower bays to the chancel, and the open roof is much more ornamental. In a very large church it

\* See *Architect*, June 29, 1878.



seems to be better not to adopt such a treatment, but in a smaller building it answers well. The piers to the nave arcade are circular, with small shafts attached to them north and south, carrying part of the arch mouldings, the remainder stopping on the subsidiary piers in "discontinuous" fashion. This is an unusual arrangement, and, if better contrived, would have looked well. It is refreshing to see a slight departure from the regular jog-trot style. Mere eccentricity in architecture for its own sake is to be condemned, but in the hands of a master the occasional wandering from the beaten path often results in the happiest successes. A building bristling with oddities, where each of them appears to be saying, "Come, look at me, I am so funny," is disturbing to the artistic eye, and cannot be said to possess that element of repose which is so essential a thing in true architecture. We do not want severe academicism, or lifelessness, but we do look for some little play of fancy and lifting-out of the commonplace.

The church which is now to be commented upon—*St. Andrew's*, Tavistock Square, formerly Woburn Chapel—may be said to have passed into history, though very recent history; and whatever is said about it must be in the past tense. Unattractive externally, when it was seen by the writer, it was still less so internally as regards the fabric. But it is surprising how much "millinery and upholstery," as some people would say, tend to brighten up and redeem a building ugly in itself. Entering the church one dark Sunday morning in the depth of winter, the interior at first sight seemed almost impressive. On the lightest day it must have looked sombre, there being only windows at the north and south ends (the church was not orientated), and these a considerable distance from the floor. A few small windows existed on the west side, but little light struggled through them. Owing to its darkness and the arrangement of nave and aisles of almost equal height, "groined" in lath and plaster, the church reminded the writer of a Spanish interior. The proportions give the appearance of being lofty, and render it effective. But there is no constructional chancel, as the building is very short and the detail is very bad—of the worst "Carpenter's Gothic." The nearest approach to anything good was the tracery of the rose window to the chancel, which, with a little modification, could have been rendered a good design. There was a plain and very open chancel screen, surmounted by a cross. The altar was considerably raised, with a very lofty super-altar quite 2 feet 6 inches high, and therefore unnecessarily high. Not only were there vases of flowers and candlesticks, but pots containing arums, an unusual adornment in such a place.

Under the before-mentioned rose window and above the super-altar was a large oil-painting, which the darkness made undecipherable. Over the window was a painted vesica, containing our Lord in Majesty, with adoring angels kneeling, and below on either side an angel standing. There were two lecterns on either side of the chancel screen doorway, hung with lace frontals; and here was read not only the lessons, but the gospel and epistle. The *raison d'être* of such a practice did not exist in this building, whereas in a very long and large church it is suitable. From the foregoing remarks it can be guessed that the ritual was "advanced," and it can cause no surprise to learn that a couple of acolytes were attached to each officiating clergyman, whenever he had in the course of the service to shift his place. A fatal bar, however, to all correct ritual arrangements was the fact that there was no central processional path or passage, as seats extended over the middle of the church. The absence of such a passage is always a subject of regret where ritual is carried out.

The fine and carefully-studied *Church of St. John the Evangelist*, Red Lion Square, so wonderfully different from the last named, shows all the characteristics of its gifted architect, Mr. PEARSON, exhibiting his refinement and happy appreciation of scale and proportion, together with his great delicacy in detail and moulding carried almost to a fault. To speak first of the exterior, there are majestic turrets—in fact, almost towers—flanking the east end of the chancel, polygonal in plan instead of being square, as are those in a similar position at *St. Augustine's*, Kilburn. The composition of the upper portion, with the little buttresses projecting at the sides of the turret between the cardinal points, is elegant. Unlike the *St. Augustine's* examples, which are covered with lead, these are crowned with stone-weathered courses, the plan at this point being circular, giving rather a heavy appearance. The pseudo-porch under the future tower is an excellent com-

position, with its gable, &c.; but it is rather to be regretted that some figure sculpture was not used here instead of so much arcaded work. A little sculpture at times gives wonderful life, interest, and variety to architectural work, which no amount of other ornament can afford. The clergy-house on the north side of the church being built flush with the east end somewhat interferes with the proportion of the chancel. It is a pity the north side does not stand clear. However, in London the exigencies of space are great, and one ought to be thankful that the remarkably irregular and awkward site has been so skilfully manœuvred by a subtle hand, so that its very blemishes have given birth to beauties. In fact, the mediæval spirit has inspired the architect, and thus uncouth angles have been cunningly coaxd by means of groining, &c. The beautiful morning chapel shows this in a conspicuous degree. The plan of the wide nave and narrow chancel reminds one of the splendid cathedral of Gerona, Spain, though of course the scale of that is infinitely greater. This noble church fitly adorns a commonplace London square by no means remarkable for its beauty. A great deal more might be said about this interesting structure, but so much has been already written about it elsewhere, that it is unnecessary to comment further on its details.

(To be continued.)

#### MR. DENMAN TRIPP'S GALLERY.

MR. DENMAN TRIPP has selected a central situation for his gallery, which occupies the angle of the Rue de Provence and the Rue Lafayette. The fête which inaugurated its opening was attended by M. ANTONIN PROUST, Ministre des Beaux-Arts, as well as by most of the notabilities of the art world. The object which Mr. TRIPP had in view has been admirably carried out. He conceived that a place of rendezvous where the *cognoscenti* could in perfect seclusion study the works of masters of which they wished to possess examples was needed; as also where they could transact business connected with art, obtain the address of artists with whom they wished to be in communication, and also where students arriving from England, ignorant of where to find the masters of special schools, could acquire information with regard to these, hear where models were to be studied, and generally obtain *renseignements* connected with their profession. Neither study, taste, nor expense has been spared to accomplish these ends. The galleries contain the most perfect examples of TROYON, COROT, MILLET, DIAZ, and the whole of the French school of the last half century which it is possible to bring into the market. ALEXANDRE DUMAS fils paid 500*l.* some years ago for a COROT, which it was his pride to point out to his artist friends as one of the finest of that master's works. By a strange accident the picture proves to have been painted by one TROUILLEVERT, who has so perfectly caught the trick of COROT's manner as to have gained his livelihood for years past by selling landscapes to picture dealers, for small sums, from which they have effaced his signature and superposed the five magic letters of the name which turns to gold a few inches of canvas otherwise not valued at as many sous. The peculiar luxury of enjoying pictures hung at a distance one from the other, in a perfectly lighted and, let us add *en passant*, exquisitely decorated *salle*, is rarely granted to us in Paris, where every centimètre of space is of infinite value. To the examples of dead masters are added specimens of the two LELOIRS (LOUIS and MAURICE), of LUMINAIS, of DE NITHS, of TOFANO, of DÉTAILLE, *e tutti quanti*. The gallery on the first floor must be inspected in order to get some idea of the artistic arrangement and refined taste with which it has been decorated. In the upper galleries is a rare collection of the engravings of the eighteenth century. To resume our idea of Mr. TRIPP's gallery, let us remark that his house is a charming home, where, as at an art club, none but the *élite* of the art world are admitted, and where specimens of various schools can be studied in all the retirement of the private home of a millionaire, to whom space, light, and luxury are the necessities of everyday life. Among the works now exhibited are FLAMENG's *Jean Bart à Versailles chez Louis XIV.*, which immortalises the famous scene where the gallant old admiral, more at home on a quarter-deck than in the perfumed chambers of the great, quietly lights his pipe while recounting his last victory to the Grand Monarque; the splendid portrait of



a woman by LEHMANN, which attracted so much attention at the Salon of this season; CLAIRIN'S *Intérieur d'un marchand au Caire*, two companion pictures by MOSLER, entitled *Les Fraises* and *Echanges de bons Procédés*; an episode of the siege of Paris by RICHEMONT, &c.

## THE ENGINEERING EXHIBITION.—II.

IRON is hardly a metal that the casual observer would pronounce to be capable of adaptation to purposes of ornament. Other metals are in themselves more sightly, they are more easily worked, and lend themselves more readily to artistic purposes. Nobody acquainted with art but knows, however, that the most beautiful and artistic of works have been wrought by the smith, and that admiration for the art of the blacksmith is in no degree second to the artist's appreciation for the daintiest work of the gold or silversmith. Old mediæval examples, for instance, here and abroad, whether still *in situ* or treasured up as relics of art, are proof of the lovely and delicate work that can be produced by masters in the craft. Thus it was a pleasure to see work such as that shown by Messrs. W. H. LINDSAY & Co. (Paddington Ironworks, Wharf Road), testifying to the excellent modern work done by the firm, samples of ornamental ironwork for churches, mansions, business premises, and mediæval ironwork being shown. Work in hammered wrought iron is beautifully represented by a thistle and bunch of roses. We can quite understand that the rose-bunch, as a matter of cost, is worth its weight in silver. It represents a spray plucked from a rose-bush, with rose and bud clustered in delicate leafage. In execution and finish it would be hard to match, let alone whether many firms would essay to do so. In the same category must be mentioned the excellent example of a panel for a door, likewise of hammered wrought iron. Other work shown includes details of gates, panelling, railing, staircase balusters, &c., of mediæval design; and as the firm undertake to carry out any designs required, architects need have no difficulty in seeking a firm to whom they may entrust the carrying out of their designs. We understand, too, that the firm are at present executing large contracts for balusters in some West End houses.

Among the exhibits of Messrs. ROBERT BOYLE & SON, of the Holborn Viaduct, and Glasgow, is shown the heating and ventilating apparatus, a full description of which appeared in *The Architect* of June 23. There is also a model of the firm's concentric tubes for drawing off the heats and products from combustion of gas, models of the complete economical system of ventilation for workmen's cottages, and plan of the system of ventilation and sanitation for dwelling-houses. The various specialities of this firm in the way of ventilators are also shown for churches, schools, halls, and other public buildings, for private mansions, hospitals, infirmaries, warehouses, workshops, and especially for ships, for the ventilation of which this firm received the 50<sup>th</sup> prize and gold medal.

The "Pennycook" Patent Glazing and Engineering Company, Limited, of Glasgow, and 57 Chancery Lane, show as a model, the section of a roof illustrating their patent method of glazing without putty. The advantages claimed for the patent are great light space, the sash bars being small in section, and the purlins far apart; no breakage of panes from expansion, contraction, or vibration; no screws, or other fastenings, to remove when replacing broken panes; no skilled labour required to replace broken panes; no drip from water condensed on the inner surface of the glass; saving in maintenance and repair; no painting required; wind and water-tightness, &c.; and that the sash-bars being self-supporting and complete, the expense of wooden or iron bars, when putty and other systems are used, is dispensed with. Among the architects for whom the firm have executed works are Mr. E. C. ROBINS, F.S.A., Mr. WATERHOUSE, A.R.A., Mr. JOHN HONEYMAN, of Glasgow, Mr. A. G. THOMSON, and Mr. A. MYLES, also of Glasgow. The highest award in the shape of a silver medal was awarded to the company at the Wirral and Birkenhead Agricultural Societies' Exhibition last year.

Messrs. SAMUEL OWENS & Co., of Whitefriars Street, Fleet Street, E.C., exhibit varieties of pumps, BLAKE'S patent direct-acting steam pumps, single, double, and treble-barrel well pumps, pumps in frames, single and double portable force pumps, irrigators, fire-engines, &c.; also hydraulic rams, hydraulic jacks, the Cassiobury fire extinguisher, &c. There

is a model of LACOUR'S patent, direct-acting, steam pile-driver. Patented in France, November 1876, up to the present time nearly 100 of these machines, provided with monkeys ranging in weight from 6 to 30 hundredweight, have been supplied to Government departments and contractors in France, Great Britain, and on the Continent. The advantages claimed for the patent are, that a rapid delivery of a number of strokes by a heavy monkey, with a moderate fall, giving a steadier and more even blow than when these conditions are reversed, as in the case of the ordinary pile-drivers—except in the Nasmyth machine, the immense cost of which renders its employment almost prohibitory. That the height of the fall and the number of blows delivered in a given time can be regulated with ease; and the monkey may be operated by hand or arranged to work automatically. That any existing pile-engine can be fitted with LACOUR'S steam-monkey, and the necessary steam may be taken from the boiler of an ordinary portable engine. And that the machine will do a greater amount of work in a more effective manner than any hitherto made, whilst its first cost and expenses of maintenance are far less than those of any other steam pile-driver. Mr. JOHN WADDELL, of Edinburgh, the contractor for the new Putney bridge, is employing three of these machines, which is very good proof of their efficiency.

The hydraulic ram is an improved, self-acting apparatus, to raise and supply water at any reasonable height or distance, without cost for labour or motive power, to public or private establishments, farm buildings, railway stations, &c. All that is requisite is to obtain a few feet of fall from the source whence the water is to be raised, which may be a brook or spring, lake or pond, &c. The apparatus works night and day, and needs but slight attention, and the cost of the apparatus is moderate. The Cassiobury fire-extinguisher, as designed by Messrs. OWENS for the Earl of ESSEX, is also shown. To the effective service of this apparatus the Earl has acknowledged that he owes the preservation of his house from total destruction by fire.

The well-known Archimedian screw ventilator of Mr. JAMES HOWORTH, 147 Queen Victoria Street, is shown by the Machinery and Hardware Company, Limited, as also Messrs. WINN & Co.'s double-action "Waterfall" pump, specially designed for irrigation works; Mr. H. L. MÜLLER'S "Alpha" patent portable gas-making machine, and a GILLINGHAM patent radiator; also a one-horse power patent vertical gas-engine of Messrs. S. CLAYTON & Co.

The valuable specialities of Messrs. EDGAR ALDOUS & SON, 18 Queen's Road, Peckham, were lately referred to when exhibited at the exhibition of the National Health Society. Messrs. ALDOUS now show their ventilating and exhaust systems as adapted for shipping purposes, and to these we may allude as illustrative of what the system may be expected to do when applied to houses, &c. The recommendations claimed for the hot and foul-air extractor are, among others, that it has no equal for extracting gas or vitiated air, and is proof against down-draught, and, being entirely self-acting, it can be applied to any class of ship, whether steam or sailing. It can be placed on deck or over skylights, and, by means of tubes connected with the bottom, conveyed to any part of the ship. At least four or six distinct ventilators can be constructed without interfering with the action of the exhaust; for instance, a moderate size tube in coal bunkers will effectually discharge the inflammable gas as generated "with disastrous consequences, where spontaneous combustion and explosions frequently result from inadequate ventilation," and so make the exhaust a ventilating shaft. By so doing it will act in a double capacity—first, by discharging gas or steam which may be conveyed into it from any part of the ship by means of pipes—secondly, there being a very strong suction it will of itself extract gas and steam independent of any pipes connected thereto. The ventiduct, or intake, is constructed upon the same principle as the exhaust, with a concentrating and concentric tube. The head receives the wind from any point of the compass, it is then carried down the concentrating tube into the concentric shaft, and thus forming a column. By means of a cone it is split up and carried into an octagonal chamber; this chamber is divided into eight separate compartments—by this means it will throw out a circle of fresh air in the form of a disc at least from four to five feet diameter, and no direct down-draught is felt. To each of the compartments in the octagonal chamber can be fixed a tube carried to any part of the ship, and so take its own proportion



of fresh air; the air in the tube again forms a column; it can then be divided as in the first octagonal chamber, and can be multiplied eight times, or less, as may be required. Although the exhaust and the ventiduct have no connection one with the other, the action of the ventiduct materially assists the exhaust, that is to say, the fresh air comes in and drives the vitiated air out.

Messrs. SALMON, BARNES & Co., Ulverston, Lancashire, and 7 Victoria Street, Westminster, show in action an A B C patent self-sustaining hand-power lift with balanced friction gearing and automatic brake. The lift exhibited was loaded with several weights, amounting in all to 56 lbs. It is so easily set in motion that a child might work it, the starting or stoppage being to all intents and purposes instantaneous when the hand is applied or withdrawn. In case of overloading the lift, the greater the weight (within limits) the more effective the brake becomes. A notable point is found in connection with the friction gearing, an improved form used without tooth-wheels, and so arranged that the wheels are kept in gear by the pressure of the weight of the cage, balance weight and load, and with an increased load there is an increased grip upon the gearing, which under all ordinary and safe conditions is sufficient to convey the power to the load without slipping, besides which any sudden strain, such as a jerk, from a jam of the cage or balance weight, or sudden release from a momentary jam, the friction gear would slip and no breakage would ensue. The speciality is quite new, and the fact that the firm are booking orders is a guarantee of what is claimed for it, namely, cheapness, simplicity, ease in manipulation and fitting up, combined with safety. A working model of the patent mining and deep well double-action balanced pumps is shown. In this pump the ordinary pump rods are replaced by tubular rods, which form the rising mains to convey the water to the surface, so that a fixed rising main is not required, thus effecting a saving in first cost of pumping plant. These pumps are double-acting and balanced, and with spring and atmospheric cushion, the columns of water are kept in motion without shock or strain, or loss of power. The firm also exhibit specimens of revolving shutters, iron and wood, and a new wood revolving shutter, moulded on both sides; each side being identical in appearance, a capital division is formed for school purposes, for which it is, among other uses, employed. It has been adopted at the Acton Priory School, among other places that could be mentioned.

Messrs. HAYWARD BROTHERS & ECKSTEIN, Union Street, Borough, have on exhibition their patent "semi-prism" ships' deck lights for securing a maximum transmission of light through decks into saloons, cabins, gangways, stores, &c. One side of the lens is nearly upright, and the other inclined at an angle, so that the light passing through the upper surface shall strike the inclined side, be reflected within the lens, and issue from the upright side in the required direction.

Mr. R. ADAMS, 7 Great Dover Street, Borough, has on view his fanlights opened by patent apparatus, patent compensation spring hinges with adjustable shoe-top centre, reversible, the patent safety windows, thief-proof casement bolts, fasteners, spring hinges, &c., and other specialities. These have been noticed lately in *The Architect*.

Mr. CHARLES D. PHILLIPS, Emlyn Works, Newport, Mon., shows samples of his patent lock-jaw roofing tiles in an improved form, lapping with a double groove or grip. The single-grip and double-grip tiles are red, dun, or glazed, as required. They form a roof impervious to wind, wet, and snow. When adjusted on a roof each tile locks into and forms a groove, and tenon joint with its fellows on each of its four sides, so that nothing can penetrate, and as each tile in process of manufacture undergoes a pressure of forty tons, they are practically non-porous. The improved hip cover of Mr. PHILLIPS is specially designed to fit any pitch of roof. These covers fit course by course with the tiles, and the ends are coved in, and when laid leave no mortar or cement visible. Also are exhibited drilling machines, planing machines, saw bench, lathe, and other machinery, shafting, leather beltings, &c.

**The Annual Excursion of the Shropshire Archæological Society** took place last week to the district around Lydbury North, including a visit to Walcot, the Shropshire seat of the Earl of Powis, the ancient seat of the Plowden family at Plowden, and the famous ancient British encampment known as the Bury Ditches on Tangle Hill, near Walcot.

## PARIS NOTES.

M. CAMESCASSE, the Prefect of Police, has demanded and obtained from the Municipal Council the necessary funds for the creation of a special service for the sanitary inspection of all kinds of lodging-houses, which number not less than 10,000 in Paris, and present in many respects, if not well looked after, a real danger for the public health. The staff of inspectors, who are to enter upon their duties on the 1st of next month, comprises five architects at a salary of 3,000 frs., four assistants at 1,500 frs., and two clerks.

The colossal statue of *Liberty*, destined to serve as a lighthouse for the port of New York, is now rapidly advancing towards completion. The body, in fact, is almost finished, and preparations are being made for placing the head, which, it may be remembered, figured at the 1878 Exhibition. It has been arranged that Bartholdi's great work shall be erected provisionally in the Parc de Montsouris, previous to being sent across the Atlantic.

The Minister of Fine Arts has decided that France shall be represented at the exhibition of the graphic arts which is shortly to open at Vienna. This exhibition is intended to be a retrospective one, showing the progress made in the art of reproduction during the last fifty years. The French exhibits will comprise specimens of the engravings executed by order of the Louvre management, of those made under the control of the Administration of Fine Arts, and last, but by no means least, of the work of private artists produced since the year 1833.

The French Archæological Society will this year hold its fifth annual congress at Caen, between the 16th and 21st of the present month. Several visits to spots of archæological interest in Caen and the neighbourhood will be made, and the council of the Society invite archæologists of all countries to attend.

The committee formed for the purpose of preserving the remains of the Arènes de Lutèce, lately discovered in the Rue Monge, has elected M. Victor Hugo as its honorary president, M. Henri Martin, senator, as president, and MM. Duruy, Clémenceau, Laurent Pichat, deputies, and M. Renier, of the Institute, as vice-presidents. The committee has decided to demand permission from the Government to organise a lottery for the purpose of raising the necessary funds to purchase the site and lay it out as a public garden.

For some time past it has been apparent that the effect of the new causeway, built to connect the celebrated Mont St. Michel with the shore at all states of the tide, and only completed about two years ago, has been to cause the violent currents that prevail there, and which formerly had free course round the island, to eat into and undermine the cliffs of the Mount, and so endanger the precious buildings it contains. These are classed as historical monuments, and as the departments of Public Works and Fine Arts, whom it jointly concerns, could not agree as to the best steps to be taken to put a stop to these ravages of the sea, the Prime Minister, a fortnight ago, named a special committee, consisting of M. Durand, Under-Secretary of State, Messrs. Antonin Proust, Casimir-Perier, Morel, and Roger-Marvoise, to proceed to Saint Michel and examine the question on the spot. The report of this body recommends the adoption of the following measures: (1) To change the direction of the causeway at a distance of a quarter of a mile from the Mount, so that the end of it may rest on the rocks between the entrance gate and the orphanage, the necessary measures being taken to connect this new terminus of the causeway with the entrance gate; (2) to undertake the necessary works to prevent all silting or deposit by the sea along the coast for a distance of 1,100 yards on each side of the Mount; and (3) to undertake immediately the repairs that have lately become urgent to the ramparts of St. Michel. It is intended to bring the matter before the Chambers at once, and demand the necessary credits for carrying out the recommendations of the committee.

It has been decided to erect new buildings for the Ecole des Chartes on a plot of ground to be detached from the Luxembourg. This school is at present an annexe to the National Archives, but it is very much cramped for room, and the keepers of the archives will be glad of the space it occupies in their building for the storing of many important documents and interesting collections now relegated to the garrets. The new school will cover an area of 6,000 to 7,000 square metres.

The death is announced of M. Edouard Fleury, a distinguished archæologist and the elder brother of M. Jules Champfleury, Con-



servator of the Sèvres Museum. M. Fleury, who died at the age of 68, was the author of a "History of the 1814 Invasion of the North-Eastern Departments of France," and several archæological works.

A young architect, M. Paul Huchet, while occupied on Monday last in examining the roof, gutters, &c., of a five-storey house in the Rue Lafayette, made a false step and falling was killed on the spot.

## BIRMINGHAM ARCHITECTURAL ASSOCIATION.

THE annual dinner of the Birmingham Architectural Association took place at the Grand Hotel on Thursday evening last week, the president, Mr. J. J. Bateman, in the chair; the vice-chair being occupied by Mr. W. H. Kendrick. Amongst those present were the Mayor of Birmingham (Alderman White), Councillor S. Edwards, W. S. Till (borough surveyor), — Earpes (borough surveyor), West Bromwich; W. Henman, J. P. Osborne, E. Wood, F. G. Hughes, V. Scruton, F. E. F. Bailey, Norman Gething, Franklin Cross (hon. sec.), and others. After dinner and the usual loyal toasts, Mr. King James gave "The Profession."

Mr. W. Henman, in responding to the toast, said that in the provinces there appeared to be a want of that feeling of brotherhood which was noticeable in the metropolis. It might be in consequence of the want of means of meeting together, but he was unable of course to say. He was pleased to know that the Architectural Association was doing a good work towards bringing about an improvement in that respect. It brought together the younger members of the profession, but the older members never seemed to meet. There was no profession which did more, if properly carried out, for the health, comfort, and happiness of mankind in general than that of the architect. It had lately been said by Dr. Foster that the medical profession should be better represented in Parliament than it was; but he thought he was correct in stating that they had not a single representative in the House of Commons. He should like to see some of their leading architects with a seat in that august assembly.

The Chairman proposed "The Association," and said he should like to refer to what was a grave question in his mind, and one upon which the profession seemed to be impotent. It was with regard to the fearful devastation of buildings by fire. If ever there was a time when fireproof constructions were needed, it was at the present moment. They were horror-struck by the devastation of invaluable art treasure which had taken place lately, and which, by due forethought, might, in all probability, have been preserved. He did not think they could lend very much help in buildings already erected, because there were so many thousand hidden sources of conflagration. It would be impossible to attempt any reconstruction with anything like satisfactory results. All that they could do was to organise chemical appliances for the prevention of the spread of fire whenever it might occur. It was important to consider the question of new erections. They did not seem to have taken due cognisance of the numberless warnings which were occurring almost every month. A most stringent building Act should help them to isolate and give substantial reality to every building, but they wanted an internal construction which should resist the ordinary action of fire. That would never in his opinion be accomplished to the satisfaction of the public until the cost of fireproof construction was so minimised as to enable an ordinary builder to do the work. There was no doubt, in the construction of theatres, rooms for public assembly, or buildings where large numbers of persons congregated, that the very great difficulty with which they had to contend was not perhaps so much the fireproof character of the building as the question of panic. The question of "panic" was an important one. He did not think that any buildings should be licensed by the authorities unless there were ample means of exit. He did not mean wide doors, where people could be thrown out, but an exit which would be effectual for the purpose of emptying a theatre in a reasonable space of time. If he were allowed to suggest the class of building that appeared to be the most suitable, he should say that all buildings should be surrounded with what he would call a fireproof shell, into which from every level all the auditory could enter the corridors, which should be perfectly safe. In illustration of what he meant, he would mention the Albert Hall, in which there was accommodation of this kind. This was a subject which should form the subject of their future study. He should be pleased to place at the disposal of the association a prize of 5*l.* 5*s.*, to be paid for the contribution of the best essay on fireproof construction, architecturally illustrated. In his opinion terra-cotta was the coming material for the external work of their buildings, and for the reason that it was as nearly indestructible as possible. Their difficulty hitherto had been more particularly in its manufacture. Its manufacture, however, had now been greatly improved.

Mr. W. H. Kendrick acknowledged the compliment, and gave a *résumé* of the progress of the association during the twelve months.

In replying to the toast of "The Mayor and Corporation,"

which was proposed by the chairman, his worship said that when he came to Birmingham thirty-five years ago, he thought that it was an ugly and uninviting town as far as its exterior was concerned. In the past few years, however, they had redeemed the past as regarded the meanness and shabbiness of the buildings. It was no longer the hardware village, but the great Midland metropolis. Birmingham now took high rank amongst the great cities of the empire. He was glad that they were living down the age of ugliness.

The other toasts were "The Visitors," proposed by the chairman, and responded to by Mr. S. Edwards; "The Retiring Officers," proposed by Mr. F. E. F. Bailey, and responded to by the secretary; "The Allied Arts," submitted by Mr. N. Gething, and acknowledged by Mr. J. W. Tonks; and the "Honorary Members," proposed by Mr. Scruton, and responded to by Mr. F. F. Proud. During the evening several songs and recitations were given by the members and visitors. Mr. C. A. Harrison, a gentleman unconnected with the profession, during the delivery of an eloquent speech generously offered to place at the disposal of the committee the sum of 10*l.* 10*s.* to be devoted to a prize for the best essay on "The Ventilation of Buildings."

At the last ordinary meeting the following members were chosen as officers for session 1883-84: President, Mr. J. J. Bateman; vice-president, Mr. W. H. Kendrick; hon. secretary, Mr. F. W. Franklin Cross; hon. treasurer, Mr. A. Reading; hon. librarian, Mr. Norman Gething; ordinary members of committee, Messrs. O. Essex, F. G. Hughes, W. G. Mantel, V. Scruton, F. Simon, H. Rayner, and E. Wood; auditors, A. Hale and T. W. F. Newton.

## PROPOSED RAILWAY BRIDGE ACROSS THE CHANNEL.

A BILL brought forward by M. Achard, the object of which is to obtain powers to make soundings preparatory to the construction of a railway bridge over the English Channel from Cape Grisnez to Folkestone, was distributed in Paris on Monday to the members of the Chamber of Deputies. It provides that the control of the soundings already taken, and of those which are to be made, at distances of fifty mètres apart, shall be in the hands of hydrographical engineers. The preamble of the Bill states that the promoters of the scheme only ask from the State this verification and control of the soundings in order to accurately determine the nature and consistence of the bottom of the sea and the depth of the water along the line proposed to be followed, and that they claim neither a subvention nor a guarantee of interest. The preamble points out that the success of the enterprise would prevent the diversion of the routes of transit from India and the East, and would create between France and England a veritable bond of union and a policy of mutual cordial agreement.

## THE ARCHITECTURE OF LEDBURY CHURCH.

AT the meeting of the Woolhope Naturalists' Field Club, held recently, the Rev. J. Jackson, M.A., rector, remarked that ecclesiastical architecture must always be regarded with peculiar interest. A thoughtful mind cannot but experience melancholy feeling on beholding the barbarous mutilations and additions to which the Gothic piles of the Middle Ages have been subjected, which nevertheless still retain a holy and venerable character, appearing through the land like monuments reared to bear testimony to the genius and piety of our forefathers. Whether any remains exist of a church at Ledbury earlier than the Conquest is doubtful; but if there be, the only fragment is the hagioscope on the north side of the chancel, which, until about six years ago, was blocked up with stone walling, plastered over and hid from sight. The rudely-constructed arch, built of stone from a neighbouring quarry, might lead to the conclusion that it was Saxon work; but on this point various opinions have been given. I am in some degree confirmed in my opinion that this is of pre-Norman date, from the fact that on the north side of the hagioscope, in what is known as St. Mary's Chantry Chapel, a Norman piscina was introduced without interfering with the hagioscope on the south side of the wall. Shortly after the Conquest, a Norman church existed of the length of the present one—viz., nave 97 feet, and chancel 90 feet, with side aisles of narrow width, and chantry chapels at the east end of those aisles, with their altars, aumbries, and piscinas, the latter of which are still remaining. The Norman doorway, with its rich mouldings, not unlike in character to the chancel arch of Kilpeck Church, the outline of two Norman windows, and the Norman buttresses with their conical heads show this at the west end, and the Norman arches of the chancel, the remains of two Norman windows, the two perfect ones in the north and south walls, and the buttresses at the east end, show unmistakably that such church existed.

All traces of Norman work in the east wall have disappeared,



and a perpendicular window has taken the place of the Norman. An examination of the outside of the west end of the south aisle shows the foundation of an aisle about eight feet in width, similar to the south aisle of the Priory Church of Great Malvern, and the drip-stone in the north and south walls of the chancel, underneath the circular clerestory windows, show that those windows during the existence of that church were in the outer walls of the building. In the north aisle is a Norman pillar and capital, from which sprung the arch which separated the aisle from the chantry chapel, and at the west end of the drip-stone on the north side of the chapel is a portion of stone cut out at an angle, which shows the pitch of the roof of that aisle and chapel, which was evidently what is called a "lean to" roof. From the grotesque carving of that date (forming, no doubt, some of the corbels) which has been fortunately preserved and inserted in the eastern ends of the north and south arcades, there is sufficient to show that the Norman church was of no mean pretensions. The pillars of the Norman arches on the north and south sides of the chancel, square to a certain height, and then circular, are singular specimens of Norman architecture. The chapels on the north and south sides would appear to have had a stone screen to separate them from the chancel, for on the east end of the walls, under the capitals, are stones with mouldings, which have formed one side of doorways to communicate with the chapels and chancel. The chancel arch is one of the obtuse pointed or drop arches, which are occasionally found in Norman work of the latter part of the twelfth century. The peculiarity thereof is that the east and west sides do not correspond in their character and mouldings.

The next important change which we find is the removal of the Norman side aisles. In the early part of the thirteenth century, when the Early English style of architecture changed the form of the windows, and elongated ones with tracery took the place of the Norman, the principal portion of the south aisle was built of a greater width than its predecessor, and appears to have been built at three different periods, the easternmost part (known as St. Anne's Chapel), as appears from a straight joint in the wall, with its three windows and doorway, being the most ancient; then the aisle, with its four windows to another straight joint in the wall, where it probably ended. From that point westward a totally different style prevails, in the formation of the buttresses, string-course and inner mouldings of the window jambs, the concave being changed to convex in the heads of the south-west and west windows. At a later period, while the Early English style prevailed, the north aisle was built with its beautiful tall windows at the east and west ends. The porch appears to have been added about that period, as the same character prevails in the outer arch, in the arch of the doorway, and the windows of the north side of the aisle, which have this peculiarity, that the heads are not curved to merge gradually into the jambs, but spring from a point, and the heads take a shape approximating to an equilateral triangle. In the porch is a lower chamber formerly connected by a staircase with two upper chambers for the use of the sacristan. One of them has a fireplace and piscina of Early English date. The proportions of the rooms have, however, been entirely destroyed by a fine specimen (I hope the last of its kind) of what is called "churchwarden's architecture," when, about thirty years ago, the ceiling of the lower chamber was raised, thereby interfering with the windows of the upper chamber, as well as with one, or it may be a doorway, in the north wall of the church.

Up to this date the north and south arcades of the nave remained in their Norman shape. In the early part of the fourteenth century, when the Decorated style was introduced, the south arcade was taken down, and the present pillars and arches were built, corresponding in form and moulding with those at Sandhurst church, in Kent—viz. a plane octagonal pier, with a simple capital and moulded abacus. A few years ago, when, in consequence of their deflection from the perpendicular, two of the present arches were taken down and rebuilt, several Norman corbels like to those still remaining in the south wall of the chancel, and portions of circular clerestory windows were found in the walls between the arches. At the same period, when the ball-flower, the ornament most peculiarly characteristic of the Decorated style of Gothic architecture, prevailed, the beautiful chapel, known as St. Catherine's, at the north side of the north aisle, was built. The wall was pierced, and an archway was made to connect the aisle and chapel; the original window over the archway was shortened, and left as it appears at present, but, until a few years ago, it was walled up and plastered over.

The last change which took place in the architecture of the church was the substitution of the present north arcade for the Norman, in the year 1619, as appears by a date on the wall-plate of the roof. The meagre capitals, with the lozenge-shaped pillars, show that Gothic architecture was then on the decline. The workmen who built those arches and pillars appear to have had one of two motives for their work, either to be at as little trouble as possible, or to preserve all that remained of the Norman arcade, for in the easternmost pillar some portion of the moulding of a Norman capital is visible, and in the four westernmost arches the Norman hood-mouldings were used, which give them their irregular and zigzag appearance, while the two easternmost arches have mouldings of a different character. The tower is and always

has been separated from the church. The lower part thereof, up to and including the lower tier of the windows, is of strictly Early English character. The original tower was surmounted by a shingle spire placed thereon without battlements. In the year 1725, October 10, the following resolution appears in the churchwardens' books: "Resolved, that the steeple shall be taken down as conveniently as it can, it being so much out of order that it cannot be repaired;" and in the year 1727, July 14, an agreement was made with — Wilkinson, mason (who built the Worcester spire), "for the new erecting a stone spire of hundred feet in height" above the present stonework. The tower was raised one storey, in which the bells were re-hung, and the present spire was built, a passable work considering the time of its erection, though the Corinthian cornice underneath the battlements, and the upper windows in the tower, ill accord with the graceful outline of the Early English windows and doorway beneath. The height of the tower and spire is 202 feet.

In the year 1771, the mutilation of the timber roofs commenced. No doubt the men of that generation were so well pleased with their performance that the north and south aisles were also "seeded," and in carrying out this unfortunate work, the mouldings on the timbers and wall-plates and the stone cornices were recklessly destroyed. These ceilings have disappeared, and the original roofs are again brought to light.

The roof of the south aisle, constructed entirely of English oak of massive dimensions, is an exact restitution of the original. On its being repaired, a few years ago, every feature of the old roof was retained. I have little doubt that the settling of the south wall from the perpendicular took place immediately after it was built; as it was found on careful examination and measurement of the principals of the roof, that they had been fitted to the expanded form of the walls. The panelled roof of St. Anne's Chapel at the east end of the aisle, is an exact copy of the original, all old work being carefully retained. The roof of the north aisle is similar in character and detail to that of the south aisle. The roof of the nave is waggon-shaped, and of much later date. All the roofs of the Early English character were of very high pitch. Towards the end of the fifteenth century they became much lower. Unfortunately the roofs of this church are placed on walls of a much earlier date, and consequently in the nave and north aisle they interfere with the heads of the windows.

Attention may be called to the glass sun-dial in one of the windows of the south aisle. There are not many of the kind in existence. They are curious, but not altogether to be depended upon for their accuracy in denoting time, as the surface is affected by the action of the wind. The painted glass in the tracery of the east window, some figures in the north window of the chancel, some fragments in the window over the door of St. Catherine's Chapel, which have been collected from other parts of the church and reglazed, is all that is worthy of notice. The other painted or stained glass is of a modern and inferior character.

## NEW THEATRE AT EASTBOURNE.

At a special meeting held on Thursday, last week, of the building committee, the members proceeded to the new theatre premises, now nearly complete, in Seaside Road, for the purpose of making an inspection. Mr. F. W. H. Cavendish, Mr. Charles Adams, Mr. Simmons, Mr. Luck, and other members of the Local Board were present, as were also Mr. F. W. Schmidt and Mr. Tomes, surveyors.

Mr. Schmidt explained to the committee the plans of the shops as passed at a previous meeting of the Board, and pointed out that it was a clear contravention of the by-laws to so arrange the theatre premises that portions of the shops incorporated should be used as private dwellings. It was contended that no adequate space had been left by the architect—Mr. Phipps—such as would justify the use of any of the upper rooms as dwellings, and that the plans, as passed by the Board, never contemplated such dwellings.

Mr. Simmons and others, on the part of the representatives of the theatre, maintained a contrary view of the question, pointing out the vast size of the frontage and the upper storeys of the new theatre.

After a considerable time had been spent in the inspection of the building, the committee agreed with the building surveyor that it would be a direct contravention of the by-laws to allow dwellings, other than the shops for business purposes only, in connection with the new theatre.

**A Sumptuous Travelling Car.**—The Central Hudson Company have just completed, for the use of Mr. W. K. Vanderbilt, the finest and most complete car which has yet been constructed. It has been prepared from plans by Mr. Vanderbilt at a cost of 5,000*l*. The body of the car is 60 feet long and 9 feet 8 inches in width. The interior is entirely finished in carved mahogany. It contains sleeping berths and bedrooms, with toilet and bath-rooms, dining-room, kitchen, &c.



## NOTES AND COMMENTS.

"OLIVER MADOX BROWN," a biographical sketch, by JOHN H. INGRAM, has been just published by Mr. ELLIOT STOCK, 62 Paternoster Row, E.C. To those who want to read of the precocity of his genius, and know something of the charm of so short a life, this work will be most interesting.

THE second edition of "Lambeth Palace and its Associations," by J. CAVE-BROWNE, M.A., is now ready (W. BLACKWOOD & SONS). As the first edition was only issued in November of last year, it speaks well for the work that a new edition is now before the public. It is a coincidence that the first edition was dedicated to Mrs. TAIT, and the preface written by Archbishop TAIT, whilst the second edition is dedicated in sorrow to the memory of Archbishop TAIT himself.

THE Kent Archæological Society will hold its annual summer meeting at Ashford on the first and second days of August. In course of the proceedings of the first day the Old Grammar School, Hinxhill Church, Brook Church, Boughton Aluph Church, and Kennington Church will be visited, and in the evening papers will be read on the "Early History of Ashford," by Mr. ROBERT FURLEY; on "Heraldry with Architecture and Art," by Canon R. C. JENKINS; and on the "Characteristics of Kentish Churches," by Mr. LOFTUS BROCK. On the second day visits will be made to Ashford Church, Eastwell Church, Westwell Church, Charing Church and the remains of the Archbishop's house, Newland Chapel, Little Chart Church, and Pluckley Church.

THE Rector of Chester-le-Street Church, the Rev. W. O. BLUNT, records the discovery of several old Saxon stones in his church, and describes the latest one discovered as the shaft of a cross bearing a figure of a man on horseback, with a Pictish shield on his left arm; above him are the heads of two dragons, and cut on their necks, which probably are intended to interlace with each other, is the name EADMUND, undoubtedly that of the Saxon king who is recorded to have stopped at the cathedral in this place on his way to fight against the Scots, and to have made rich presents to the shrine. But the peculiar part of the inscribed name is that the M and N are in Runic characters, the rest of the letters being the ordinary Roman type.

WE lately commented on the supposed connection of CHAUCER with Woodstock, the evidence of which rests only on poetical allusions and local tradition. On occasion of a visit paid by the Birmingham Midland Institute to Kenilworth Castle, on Saturday last, Mr. HOWARD S. PEARSON, who gave an address on the history of the castle, argued that CHAUCER and SHAKESPEARE must have visited the castle, a supposition which he based on an apparent allusion in the "Midsummer Night's Dream" to the festivities which took place when Queen ELIZABETH visited the Earl of LEICESTER. The argument no doubt is ingenious, but is hardly evidence of the fact, though it may tend to found a local tradition, or even history.

It is questionable how far technical knowledge on the part of a judge is advantageous to the suitor. A judge who is specially informed, or a counsel specially qualified, in any particular branch of scientific or technical knowledge is apt to take for granted a knowledge on the part of others which they do not possess, and to neglect careful investigation where it might be useful in enabling him to arrive at the truth. The skill of the counsel lies more in his power of extracting information from the witnesses than in the use of any special knowledge of his own with regard to the subject in dispute. The ability of the judge is best seen in the use to which he puts information so placed in possession of the Court. Strange though it may appear, a technical knowledge on the part of the judge is rather apt to bias or weaken his judgment than to assist him in arriving at a correct conclusion. Mr. Justice STEPHEN appears to prefer the evidence of his own eyesight to the testimony of expert witnesses, and in a "light and air" case the other day adjourned to view the premises where the light was alleged to be obstructed. He seems to have personally formed a speedy judgment in the case, and to have given a verdict

accordingly for the defendants. The judgment was no doubt sound and the decision right, but if a judge does not rely on the evidence of experts in these matters, the suitor may be spared the expense of calling them. Judges of the Chancery Division have recently adopted a plan of appointing or selecting a skilled witness to report to the Court independently of the parties to the action, and the plan has been hitherto successful. We are unaware of the amount of technical knowledge possessed by Mr. Justice STEPHEN in "light and air" cases, but it may be doubted whether the learned judge had a proper opportunity for forming a sound judgment during the short adjournment of the Court when he inspected the building. Our judges, moreover, will find abundant and varied occupation if this practice of inspecting the *locus in quo* is generally followed.

A MEETING has lately been held at Earls Barton to form a committee for the purpose of carrying out the restoration of the tower of the famous and interesting old church of Earls Barton. A committee previously appointed has already succeeded in getting in subscriptions for the purpose, and with this as a starting-point there is little reason to expect that the necessary funds needed for the required work will not readily be forthcoming.

A MEETING of the National Smoke Abatement Institution is, we learn, to be held at the Mansion House on Monday next, at three p.m., to report progress and consider measures for further advancing the important objects connected with the Smoke Abatement movement. The meeting will be held under the presidency of the Lord Mayor, supported by the Duke of WESTMINSTER, K.G., the Duke of NORTHUMBERLAND, Sir R. A. CROSS, Sir WILLIAM SIEMENS, F.R.S., and others.

THE arrangements for the annual meeting of the Royal Archæological Institute, to be held at Lewes, are now complete. The Earl of CHICHESTER is president of the meeting, and the presidents of sections are—of antiquities, Major-General A. H. LANE FOX PITT-RIVERS, F.R.S., F.S.A.; of history, Mr. E. A. FREEMAN, D.C.L., LL.D.; and of architecture, Mr. J. T. MICKLETHWAITE, F.S.A. The Mayor of Lewes, Mr. CROSSKEY, heads a large and influential local committee. The inaugural meeting will be held on Tuesday, July 31, at noon, when the president will deliver an address. The Castle and Priory will be afterwards inspected, and the various sections will be opened on that and the two following evenings, when papers will be read. There will be daily excursions in the neighbourhood, among other places to Pevensey Castle, Rye, Winchelsea, Hastings Castle, Battle Abbey, Hurstmonceaux Castle, Worthing, New Shoreham, Old Shoreham, Arundel Castle, &c. The mayor gives a *conversazione* on the Thursday night.

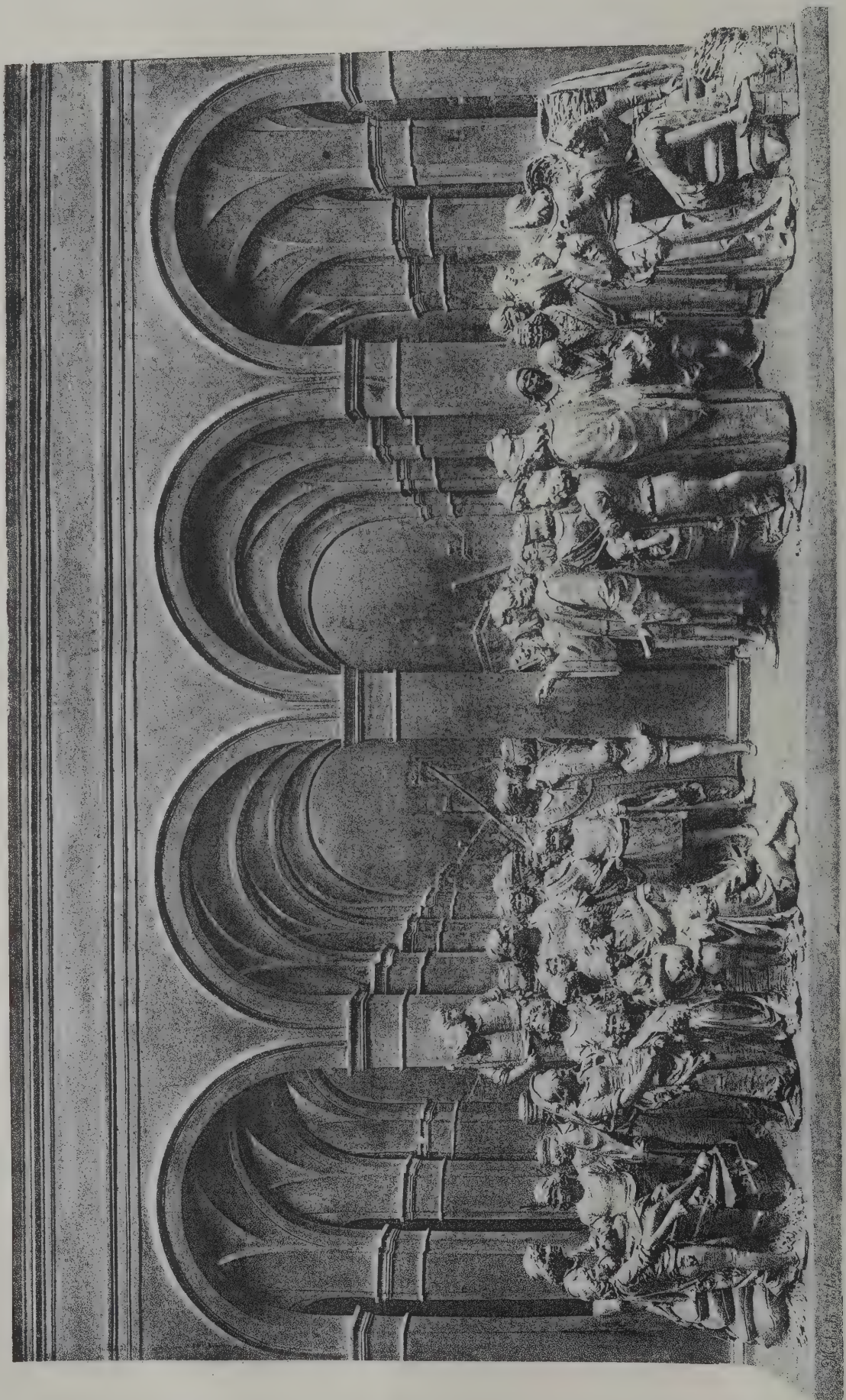
A FIRST Annual Manufacturers' Mediæval, High Art, and Ecclesiastical Furniture and Decorative Exhibition is announced to be held in Humphreys' Hall, Albert Gate, Hyde Park, from August 25 to September 8 next. As a representative trade exhibition, it cannot fail to be most interesting to our readers and the general public, who will have an opportunity of inspecting specimens of Mediæval and high art workmanship in all its varied designs and branches. The ecclesiastical and decorative sections are intended to be specially attractive, many eminent firms in connection with the trade generally having already secured space for their exhibits.

A REPORT has been presented to the Canterbury Town Council by the surveyor on the means of egress from theatres and public halls in the city. In the case of one theatre, there was a narrow corkscrew staircase allowing only one person to come down at a time. Consequent on this report the Council decided to call upon the owners of the halls and the theatre to make all the doors open outwards; and in the case of the theatre, it was further decided to ask the owner to alter the staircase in such a manner as to render it safe, adding that in the event of his failure to do so, the Council would oppose the renewal of the license. It is quite time other towns, who have not yet done so, should institute a like examination. It will be curious to see what revelations follow in consequence.









LANRO QUIRINI TEACHING IN A VENETIAN PIAZZA.  
FROM A BRONZE RELIEF BY G. MICHELO.

Sprague & Co. 22, Mark Lane, Cannon St. E.C.





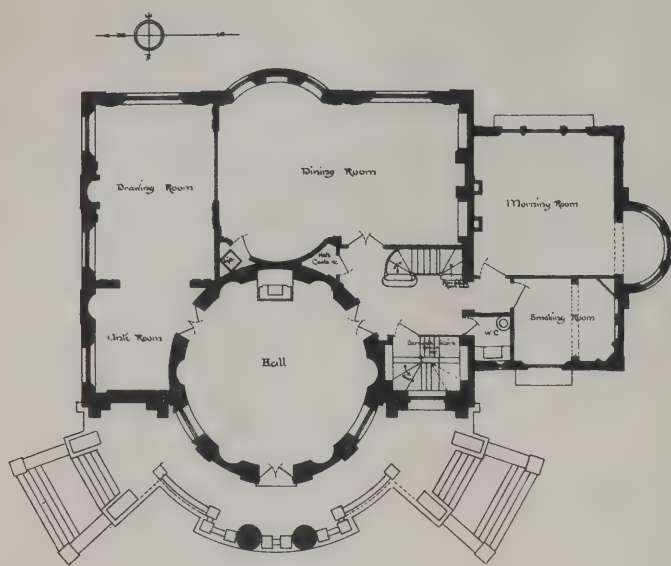






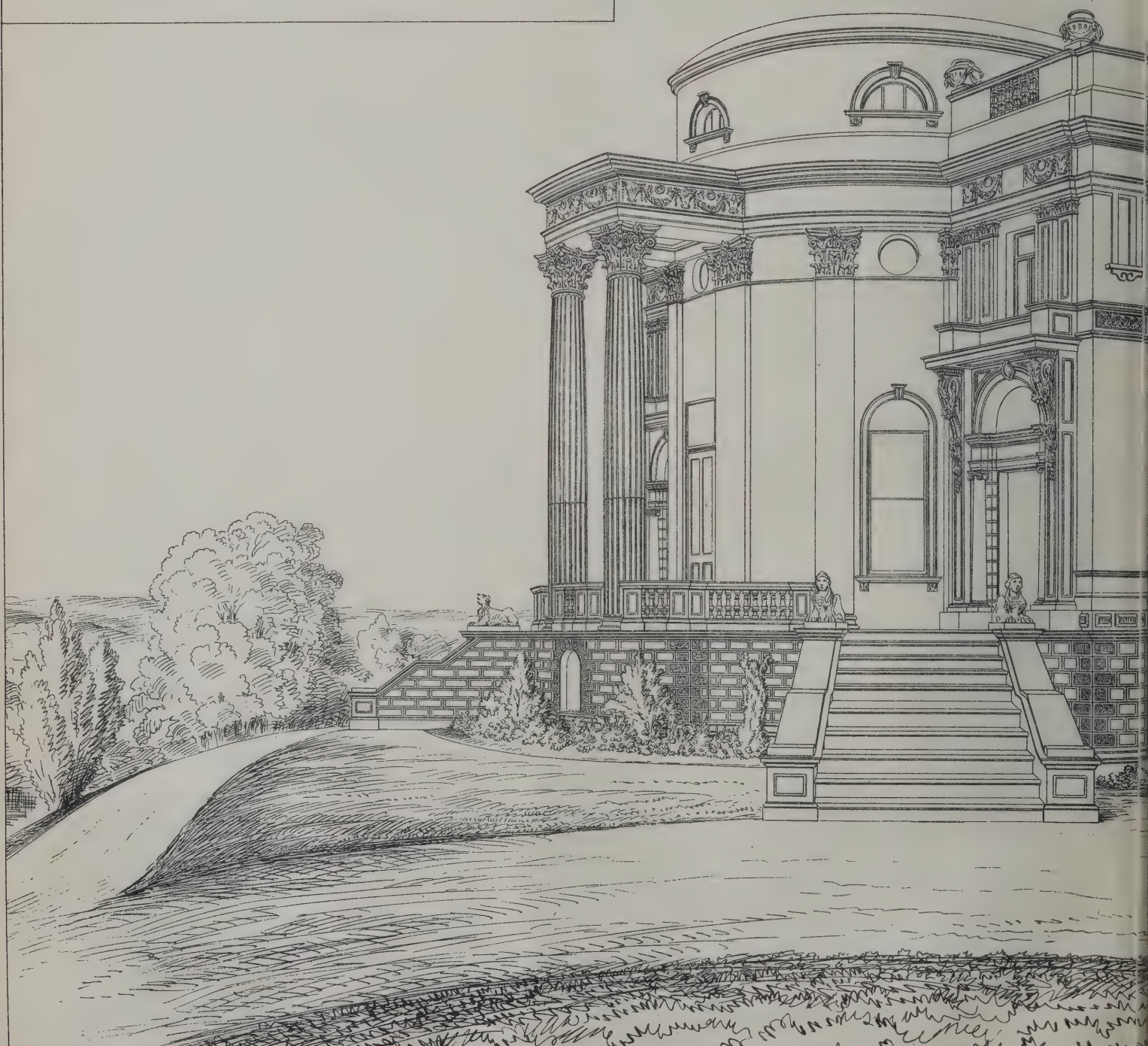






Ground Floor Plan

Scale of 1 inch = 10 feet



VIEW OF TEMPLEMERE. D.  
SHEWING ADDITIONS  
ARTHUR OWEN



July 14<sup>th</sup> 1883.



LANDS PARK, WEYBRIDGE.  
FOR W. HEWETT ESQ.  
ON, ARCHITECT.

Sprague & Co. 22, Myrtle Lane, Cannon St. EC



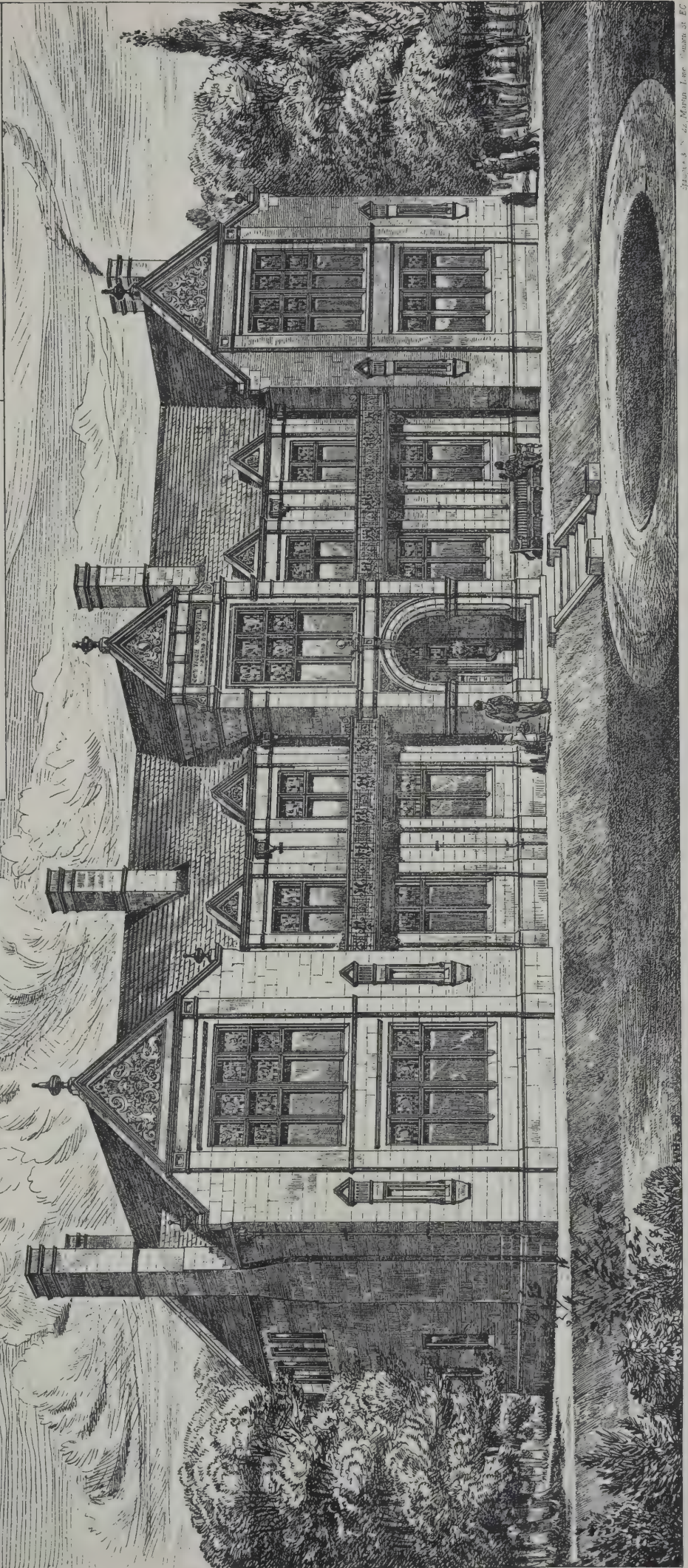
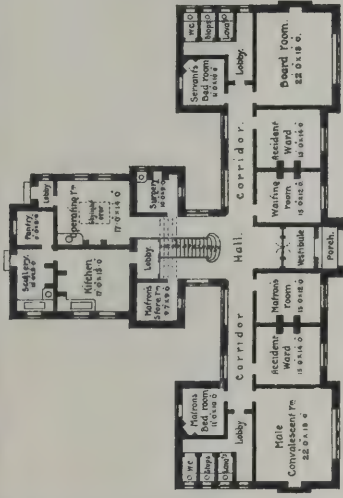
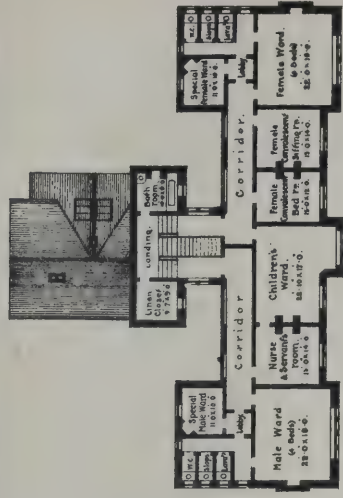




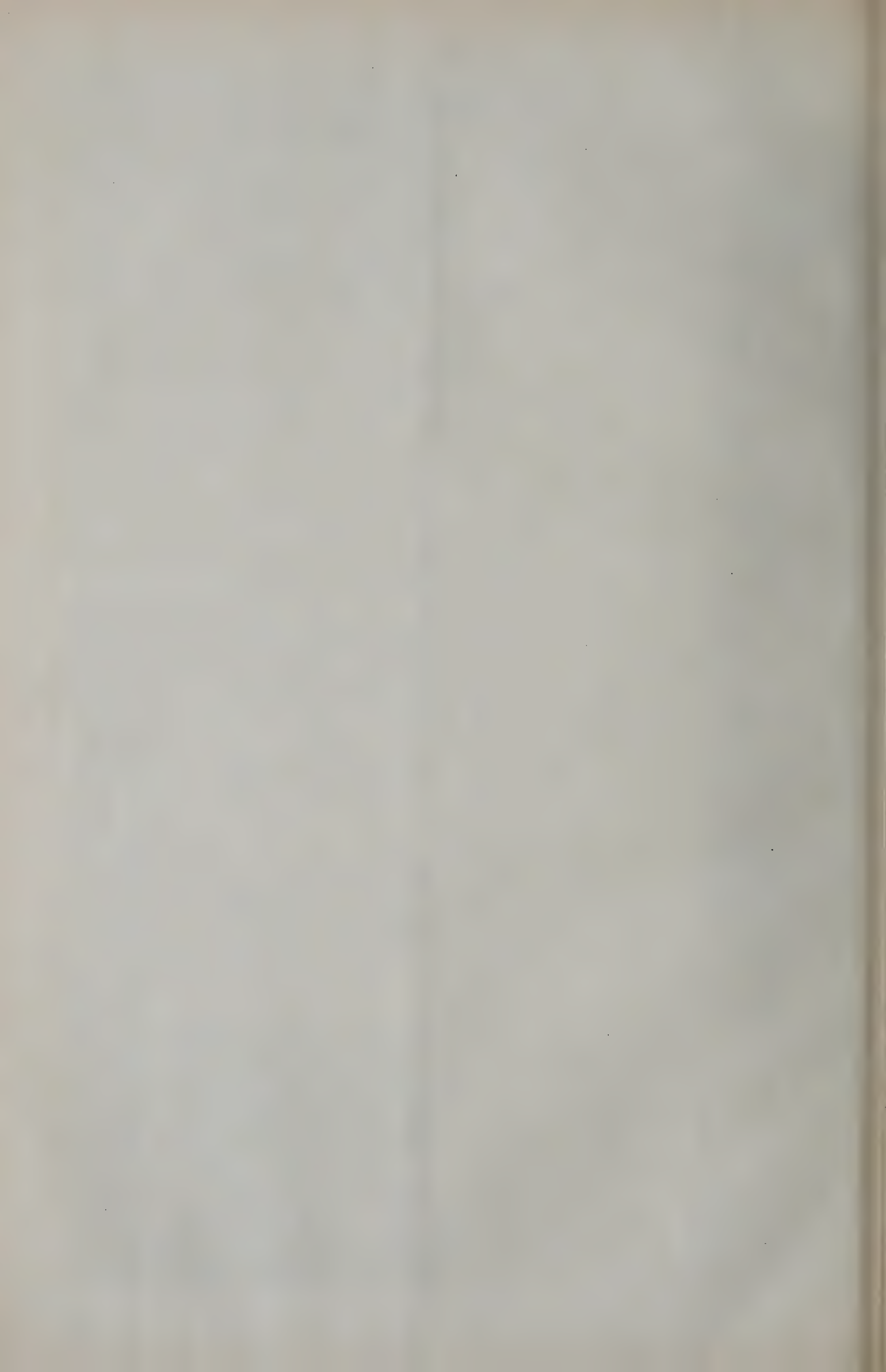
# BATLEY COTTAGE HOSPITAL

Walter Hanstock A.R.I.B.A. Archt.

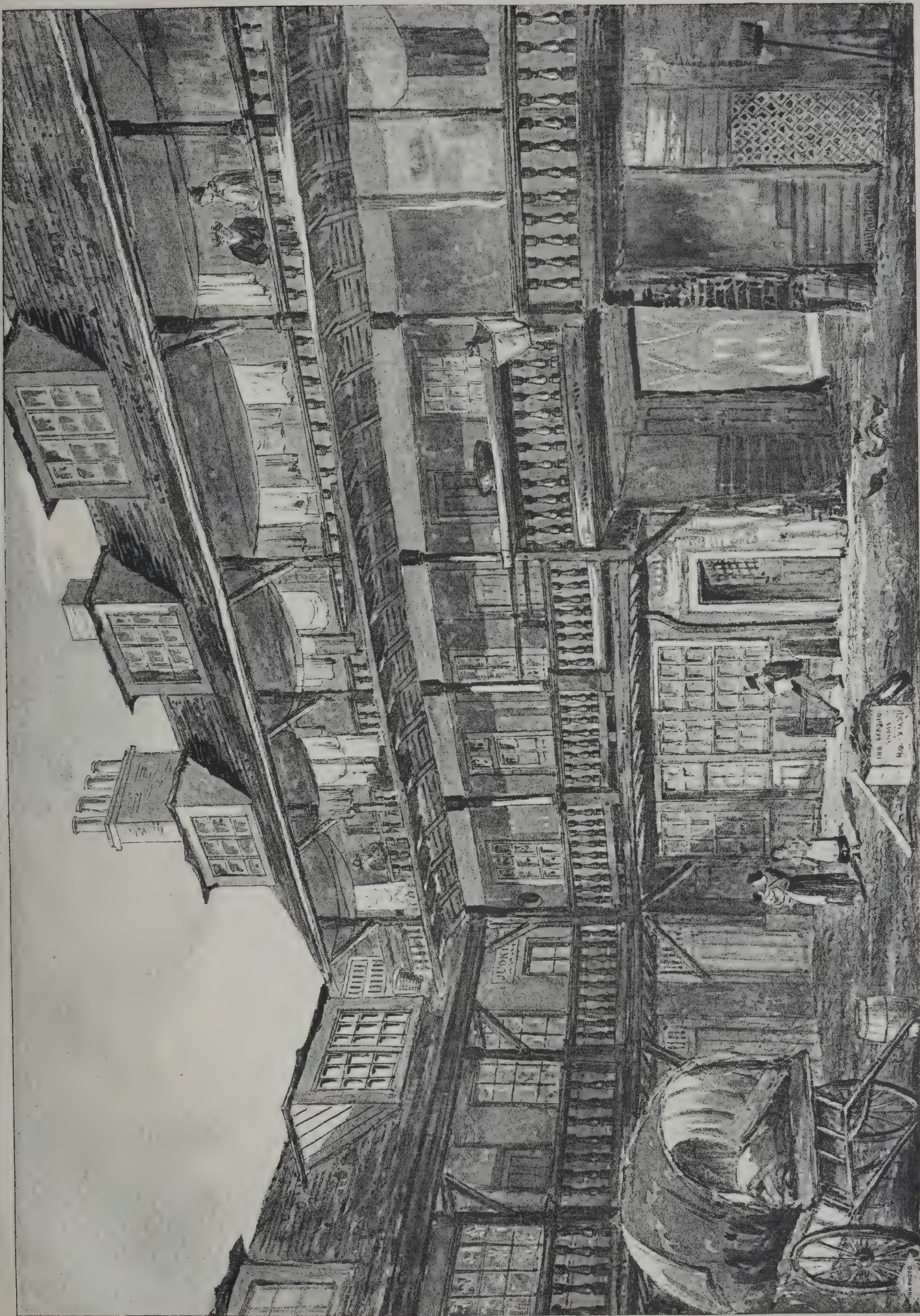
Batley, Yorks. Jyue. 1881.











THE OXFORD ARMS, WARWICK LANE.  
(Now Destroyed)  
FROM A DRAWING BY W. HILTON NASH







## ILLUSTRATIONS.

TEMPLEMEERE, OATLANDS PARK, WEYBRIDGE.

THE additions that have from time to time been made to this building have enlarged it from an intended summer-house or smoking-salon to a very commodious mansion. It was originally commenced by the Duke of YORK when residing at Oatlands Park; and His Grace intended to have reproduced as a summer-house a fac-simile of the Temple of VESTA at Rome, but unfortunately the original design was never completed beyond the cornice on the main building and the two columns as shown in this view. The shell remained in this state until some thirty years ago, when it was purchased and converted into a hall for the approach to the few rooms that were built round it.

The present owner, Mr. WILLIAM HEWETT, has lately added the southern wing, as can easily be seen by the plan, and has decorated the interior entirely in keeping with the style of the building, the effect of which is anything but severe. A domed ceiling, richly coffered and groined round the circular windows, has been placed over the entrance-hall, which is nearly 30 feet high; and the walls of the hall are further enriched by niches, as shown on plan, and the pilasters which support the dome. All this work is in carton pierre, by Messrs. JACKSON & SONS, of Rathbone Place. There is a billiard-room under the smoking and morning-room, and to gain sufficient height it has a solid wood-block floor kept one or two feet below the level of the ground.

The situation of the house is most charming, being placed on the extreme edge of the Oatlands Park hills, and having from three aspects views extending for fifteen and twenty miles across the valley of the Thames to Chertsey, Egham, Windsor, Sunbury, &c. The additions have been carried out under the superintendence of Mr. ARTHUR CAWSTON, Architect, of Spring Gardens, S.W.

OTE HALL, SUSSEX.

THIS work has been carried out for Major-General GODMAN, by one of whose ancestors the house was built in the early part of the sixteenth century. The house is of excellent timber construction, with good external and internal details, and, as it was generally in good condition and all unnecessary alteration was carefully avoided, it is now an unusually authentic specimen of the smaller country-house of old date. There is a very good staircase and some good panelling and mantelpieces. The offices, &c., have been placed in a new wing adjoining the old building, so as to avoid interference with the old plan. The architect was Mr. RALPH NEVILL, F.S.A., of Guildford and Gray's Inn, and the builder, Mr. S. NORMAN, of Burgess Hill, and to the latter great credit is due for unusually intelligent care.

BATLEY COTTAGE HOSPITAL.

THE OXFORD ARMS, WARWICK LANE.

THIS ancient hostelry, formerly situated in Warwick Lane, Paternoster Row, was demolished in 1878, and the residence of the minor canons of St. Paul's Cathedral now occupies the site. As will be seen from the illustration, it was an excellent example of the galleried inns at one time so common in London, but now becoming more scarce every year. That the Oxford Arms existed before the Great Fire of London is proved by an advertisement in the *London Gazette* for March 1672-73, quoted in "Cunningham's Handbook of London": "These are to give notice that EDWARD BARTLETT, Oxford carrier, hath removed his Inn in London from the Swan at Holborn Bridge to the Oxford Armes in Warwick Lane, where he did Inn before the Fire. His coaches and wagons going forth on their usual days, Mondays, Wednesdays, and Frydays. He hath also a Hearse, with all things convenient to carry a Corps to any part of England." The inn was within the area of the fire, in which it probably perished, but was rebuilt a few years later on the old plan, the buildings surrounding a large courtyard, and bounded on the western side by the remains of the old city wall.

The following passage occurs in "Stow's Survey," page 33, and points to the antiquity of Warwick Lane, in which this inn was situated: "Nearer to our time, I read, in the 36th of HENRY VI., that the greater estates of the realm being called up to London . . . RICHARD NEVILLE, Earl of WARWICK,"

came "with six hundred men, all in red jackets embroidered with ragged staves before and behind, and was lodged in Warwicke Lane, in whose house there was oftentimes six oxen eaten at a breakfast, and every tavern was full of his meat, for he that had any acquaintance in that house might have there so much of sodden and roast meat as he could prick and carry upon a long dagger." W. H. N.

QUIRINI LECTURING IN VENICE.

WE give an illustration of a remarkable work in bronze, which was completed a few months ago. It was modelled by Signor G. MICHELO, and was cast by his father, who has a great reputation in Italy for his works in metal. The subject is taken from the life of LANRO QUIRINI, who lived in the early part of the fifteenth century. At a time when the ardour for classical and other studies was growing stronger day by day in Italy, it was the endeavour of QUIRINI to bring the new learning to all classes, and hence it is said he discoursed on philosophy in the Piazza dei Mercanti in Venice, and wherever the people congregated. What he taught has long been forgotten, but at that time there were more scholars in Italy than in all the rest of Europe, and QUIRINI, like some of them, may have been a prodigy from his "vastissima erudizione." Italy now possesses an enduring memorial of the philosopher in bronze.

## THE CHANNEL TUNNEL.

THE joint committee appointed by both Houses of Parliament to consider and report upon the general question of the Channel Tunnel met on July 10 to consider the report of Lord Lansdowne, the chairman, and the reports prepared by other members of the committee. The report of Lord Lansdowne declared substantially in favour of the tunnel, and on this the committee first divided, rejecting the report by six to four. The minority were Lord Lansdowne, Lord Aberdare, Mr. Baxter, and Mr. Peel, and the majority were Lord Devon, Lord Camperdown, Lord Barrington, Sir Massey Lopes, Sir Hussey Vivian, and Colonel Harcourt. The committee then proceeded to discuss the remaining reports, of which there were five. All of these were hostile to the scheme, but on different grounds, the reasons advanced in one report for opposing the scheme conflicting with the reasons advanced in another, which arrived, however, at the same conclusion. On the reports of Sir H. Vivian and Lord Barrington the numbers were equal, which was equivalent to their rejection; and as none of the remaining reports gained the approval of the majority, it was ultimately resolved that the report to Parliament should be confined simply to the facts that four were in favour of the scheme and six against it, and that no distinct declaration beyond this could be agreed upon.

## NATIONAL COMPETITION WORKS AT THE SOUTH KENSINGTON MUSEUM.

THE private view of the yearly exhibition of prize works by students of the Government schools of art in this country was held on Thursday. There are now nearly 200 schools of art and branches in the United Kingdom. From these schools, close upon a quarter of a million of drawings, paintings, models, and artistic designs for manufacturers have this year been received and examined by the Art Department. But barely 1,000 of them reached the standard required for "national competition." The rewarded works are now to be publicly exhibited in well-proportioned, top-lighted corridors forming part of the new buildings destined ultimately to accommodate the National Art Library of the South Kensington Museum.

A fresh departure has been taken in the arrangement of the exhibition. Entering its first division, at the eastern end of the gallery, we find it composed only of drawings and paintings each distinguished by the award of a gold medal; in like manner, the works for which silver medals are given form the next section; bronze medal awards the third; and national book prizes the fourth. All these works exemplify in strong or weak degree various "advanced" stages in the course of art instruction propounded by the South Kensington Department for the acceptance of the country. To complete this exemplification a series of specimen drawings of rudimentary work which beginners are set to carry out is added. Upwards of 520 works are thus included in this year's exhibition, which maintains the high and useful standard of careful execution and student-like neatness reached in previous years. Occasionally going beyond this condition so necessary in the early practice of the designer are works which show inventiveness and some originality in the use of recognised canons. Designs for carpets (Nos. 21 and 30) from Glasgow,



based upon Oriental patterns, are probably in advance of many similar productions shown in previous years. A stereotyped class of wall papers of floral patterns, picked out with gold lines, has apparently given place to designs more harmonious in effect and less unsuitable as backgrounds for the sketches, prints, bits of china, &c. There are two or three notable designs for printed stuffs, one (No. 16) from Manchester in particular; while for distinguished elegance, the pattern of garlands and chrysanthemums (No. 1), to be some day, perhaps, woven into a silk hanging at Macclesfield, has rarely been surpassed. That which takes a silver medal (No. 67) comes from Exeter. A feature of promise in this year's exhibition seems to lie in schemes for decorative work in which figure composition plays a leading part. No. 379 is an ambitious design from South Kensington for the lid of a grand pianoforte—a cleverly-drawn composition of sirens luring mariners. A great classic galley, fancifully constructed, with highly-reared prow and architectural temple in the stern, occupies the central position. To the right, upon a rocky foreground, is a group of nude and draped figures, towards whom boatmen are wading from the galley. Sirens swim about the beak and others hover in flight among the tackle. Of quite different character is the set of decorations for a room (No. 73), from the West London School, done chiefly in tones of dark blue, brightened here and there with gold, and of a style which is identified with that used by the late Alfred Stevens and by his pupils for much of the ornamental work of the South Kensington Museum. No. 308, from the same school, four small panels of Apostolical figures merit a book prize, although the student has attempted to model his style upon such broad and free treatment of figure composition as attained a height of excellence through the great Italian masters of the late fifteenth and sixteenth centuries.

Modelling is conspicuously strong this year. The South Kensington and Lambeth Schools of Art hold a pre-eminence in this stage. No. 4, a model of a nude figure from the life, in half-reclining posture, is a good example of what sound instruction may effect.

It may be interesting briefly to note that the Hanley and South Kensington Schools each carry off two gold medals, the remaining gold medals falling to schools at Macclesfield, Hull, Sheffield (No. 5, two cleverly-modelled and appropriate designs for cast-metal panels), Leicester, Brighton, Bloomsbury (No. 11, water-colour painting of flowers), and West London (No. 12, design for tiles). Besides these, 58 silver medals, 105 bronze medals, and about 210 national book prizes have been given.

### THE NATIONAL PORTRAIT GALLERY.

THE twenty-sixth annual report of the trustees of the National Portrait Gallery was issued on Wednesday. Since last report the following donations have been made: John Britton, F.S.A., Mary Ann Cross ("George Eliot"), King George II., Sir William Grant, Professor Richard Parson, Sarah Austen, John Flaxman, R.A., Anne Flaxman, Oliver Goldsmith, John Ramsay McCulloch, Lord John Russell (a marble bust), John Rennie, F.R.S., Sir William Hamilton, K.B., John Singleton Copley, Lord Lyndhurst, Viscount Stratford de Redcliffe, K.G., Admiral Lord Lyons, G.C.B., John Keats (a mask in plaster). The following portraits were purchased: Anne Boleyn, fourth Earl of Southampton, K.G., military group of officers, second Marquis of Londonderry, K.G. (marble bust). A number of autograph letters has been added to the collection.

The Trustees propose to continue the issue of a shilling catalogue as hitherto, with a supplemental catalogue of the latest accessions at sixpence each, and also to provide a simple list of the portraits with dates and painters' names, to be sold for one penny. In a former report to the Board of Treasury, the Trustees stated that "the great success which attended the alterations in the 'High Room' by blocking up all the side windows and opening skylights in the roof instead," induced them to hope that a similar improvement might be effected by Her Majesty's Office of Works in the upper long gallery, where the construction of the roof naturally lent itself to such an arrangement. This proposal having been favourably entertained by Her Majesty's Government, the pictures and busts were forthwith dislodged from the upper long gallery and disposed as far as practicable in other parts of the building. The temporary crowding in some places and the enforced disregard of chronological order continued till the autumn of last year when the pictures were replaced under a completely new arrangement.

At this time the pictures presented by the Society of Judges and Serjeants-at-law from Serjeant's Inn, and by the trustees of the British Museum, which had hitherto been kept together in the "High Room," were, in accordance with an understanding established at the time, dispersed and incorporated in the rest of the collection in chronological order. These pictures, from the vivid colours of the legal costume, are now seen to greater advantage, as they are toned down by being hung in proximity to other portraits which are proportionately relieved from monotony of colour. The "High Room," formerly occupied by the Serjeant's

Inn and British Museum pictures, will now be mainly appropriated to the display of recent acquisitions and to portraits requiring particular attention, until such time as they also may be drafted off and incorporated chronologically in the rest of the series. Inscribed tablets distinguishing the pictures presented by the Society of Serjeant's Inn and the trustees of the British Museum, with historical information regarding the persons represented, are in preparation, and will be affixed to each frame. But these historical notes, being somewhat copious and elaborate, require considerable time for completion. On December 11 last, the new arrangement of the pictures having been completed, the entire series of these galleries was again thrown open to the public. In the new distribution of the pictures and sculptures more space has been assigned to portraits and records of the earliest period. The vestibule at the top of the eastern staircase is occupied by portraits and monumental effigies of the Plantagenet dynasty. Large inscribed placards or tablets, giving dates of the different rulers and explaining the system of classification adopted, have been affixed to the walls and screens throughout the building.

The Trustees in their report of last year referred to their financial position as affected by the large amount which it was thought advisable to spend on the purchase of the Conference picture at the Hamilton sale. The funds specially placed at their disposal for this purpose having been more than exhausted, they have in consequence been considerably crippled in their resources for the current year. They, however, report that the picture in question is universally admitted to be an acquisition well worthy of such a special expenditure, regard being had both to its artistic and its historical merit. They believe that the readiness with which the Government afforded them special facilities on that occasion was fully appreciated by Parliament and the public, and they trust that whenever such opportunities for enriching the gallery present themselves the same consideration may be afforded as materially adding to the public interest in the gallery, an interest which they believe to be steadily progressing.

### HUDDERSFIELD FINE ART AND INDUSTRIAL EXHIBITION.

ON Saturday last the Duke of Somerset, K.G., performed the double ceremony of opening the New Technical School and Mechanics' Institute, and the Fine Art and Industrial Exhibition in connection therewith. The institute dates back more than forty years, and during that period it has performed an exceedingly valuable work with regard to primary, secondary, and technical education; but it was some years ago felt that if Huddersfield and the neighbouring district were to successfully compete with foreign nations in the production of articles of fancy manufacture, it was necessary that still further opportunities should be afforded of acquiring that particular kind of technical instruction which should fit workmen to carry on successfully the various trades in which they were engaged. It was at first decided to extend the old institution, but later councils determined on erecting a new building at a cost of 20,000*l*. Plans were furnished by Mr. Edward Hughes, architect, of Huddersfield, and a handsome and commodious building has been erected. About 15,800*l*. has been already promised or subscribed—the Clothworkers' Company (London) contributing 2,000*l*., Sir John W. Ramsden, 1,000*l*., and so on.

### SANTA FÉ, MEXICO.

SANTA FÉ, the capital of New Mexico and the oldest city in the American Union, is now celebrating its tercentenary, or what is believed to be the 333rd year of its existence. The surrounding region was occupied after a fashion by the Spaniards, under Coronado, who, in 1550, laid out the city, which still preserves in many respects the characteristics of a Mediaeval Spanish town. The houses are mostly one-storeyed. All that are not wooden are built of sun-dried bricks, so that in appearance they differ little from the ground on which they are raised. Even the cathedral and the "palaces" of the Governor and the Archbishop are built in this fashion. The chief industry is gold and silver filigree work, which is frequently of remarkable ingenuity and beauty. Very many exquisite specimens of this work will form one of the chief attractions of the "exhibition," which is itself the principal feature of the tercentennial celebration. The Pueblo Indians also exhibit some very interesting examples of their singular earthenware, which is a combination of the old Mexican work. Some of them represent grotesque figures like the old Aztec divinities; others domestic utensils of all kinds. All of them are usually of bright colours. Some authorities contend that the present city of Santa Fé is only a continuation of an older Aztec town named Cicuye. The railway now connects it directly with the port of Guymas, on the Gulf of California, whence, no doubt, steamers will run across to Australia, Japan, and China, opening up a future hardly dreamt of by the first Spanish settlers,



THE ARTISTS' BENEVOLENT FUND.

LORD THURLOW presided over the seventy-fourth annual festival of this fund, lately held. During the past year 66 widows and 15 orphans of artists received annuities amounting in the whole to the sum of 1,306*l*. Since the institution of the society the sum of 45,690*l*. has been distributed to widows and orphans of artists, the recipients being in circumstances which rendered them proper objects for assistance. The chairman, in proposing the toast of the evening, drew attention to these facts, and commented upon his occupation that night of a position which had been held in bygone days by men of the stamp of Lord Russell and Lord Palmerston. He dwelt upon the uncertainty of the artist's profession, notwithstanding the increase of appreciation shown for art, and said that the perplexities of those who administered the funds had been correspondingly increased. In speaking upon the influence which the work of the artist exercised, he expressed his view that it was outrageous that in this large first city of the Empire the multitude should be debarred from the study of works of art on the Sunday, while in other large places, centres of population, the creations of art were open to the view of the people. He warmly commended the fund to the benevolence of the public. Mr. John Absolon responded to the toast, and then Mr. Lambton Young, the secretary, read the list of subscriptions, which, headed by Her Majesty's annual subscription of 100 guineas, amounted to upwards of 500*l*. Other toasts followed. The musical arrangements were under the direction of Mr. Cozens.

GLASGOW MUNICIPAL BUILDINGS.

At a meeting of the Town Council last week, the tenders sent in for the erection of the municipal buildings were considered.

The Town Clerk read the report by the sub-committee appointed to consider the tenders. The minute contained a report by the architect and measurers to the effect that they had examined ten estimates sent in by ten contractors, and checked the four lowest of these. The four lowest tenders were as follow :—

Contractors.	Amount of original offer.		Amount after checking.	
	If Polmaise stone.	If Dunmore stone.	If Polmaise stone.	If Dunmore stone.
Morrison & Mason .	£ 163,080 3 0	£ 163,080 3 0	£ 163,086 0 3	£ 163,086 0 3
James Watson & Son	170,000 0 0	—	170,000 0 0	—
David Short & Co. .	180,008 0 0	180,008 0 0	180,984 2 0	180,984 2 0
Watt & Wilson .	181,000 0 0	186,350 0 0	180,995 14 1	186,345 14 1

The other offerers were: A. & T. Stewart, 183,496*l*. 14*s*. 10*d*.; F. & D. Meikle, 198,196*l*.; Alex. Muir, 213,089*l*.; Robert M'Cord & Son, 221,600*l*.—221,000*l*.; Edmund Gabbatt, 223,399*l*. 19*s*. 9*d*.—230,399*l*. 19*s*. 9*d*.; John Thomson, 237,991*l*.—224,923*l*. To the tender of Messrs. Morrison & Mason the following condition was attached: "This tender is made on the understanding that it is in our option to take the stones from Polmaise or Dunmore quarries." The reporters stated that in their opinion this condition must be withdrawn before the estimate could be accepted. In preparing their estimate Messrs. Morrison & Mason had omitted to price and extend seven items in the mason-work schedule, which, if priced at the rates of the next lowest offer, would increase the amount of their offer by the sum of about 830*l*. The sub-committee, having considered the report, resolved to recommend that the Council authorise the committee to accept the offer of Messrs. Morrison & Mason, whom failing of James Watson & Son, whom also failing of David Short & Co., whom also failing of Messrs. Watt & Wilson, on the distinct footing and condition as regards the offer of Messrs. Morrison & Mason that the stipulation by them to the effect that they should have the option to use either Polmaise or Dunmore stone shall not receive effect, but that, on the contrary, it shall be in the power of the Corporation to determine which of the descriptions of stone above referred to shall be used either wholly or partially in the construction of the buildings, and subject, as regards the several offerers in the order above set forth, to the further conditions—(1) That the contractors to be preferred shall find sufficient caution, to the satisfaction of the Corporation, for their due and perfect fulfilment of the contract; (2) that the sub-contractors to be employed by the contractors shall be subject to the approval of the architect; and (3) that a contract for the due and proper execution of the work be forthwith entered into between the Corporation and the contractors and their cautioners. Subject to these recommendations, the sub-committee further recommend that it be remitted to the Municipal Buildings Committee to make all the requisite arrangements for proceeding with the work, and fix the time within which the work shall be completed, and the penalties for failure; to determine the stone to be used in the building, and further, to determine as to the

cautioners to be offered by the contractors, and to adjust and complete the contract on behalf of the Corporation.

Mr. Osborne moved the approval of the minutes. As to the stone to be used in the construction of the buildings, the contractors were bound to take it from two quarries. These quarries were substantially the same stone, but it must be in the option of the Corporation to say which of the quarries the stones were to be taken from. The reason why the Council were asked to approve of a written minute was that there was a large amount of brick work connected with the building. The brick to be used required to be of a special form, different from that presently made in the neighbourhood. It was important that they should have summer weather for the manufacture of these bricks, and therefore it was desirable to hasten the completion of the contract.

Treasurer Walls seconded the motion.

Mr. Neil wished to know how the cost of the building would be under the estimate, seeing that the mason work was to cost 164,000*l*.

Mr. Osborne said that was the offer for the whole contract, including mason work, joiner work, slater work, and everything.

The motion was unanimously adopted, and it was remitted to the Building Committee to make arrangements for the ceremony of laying the foundation-stone.

ELECTRIC LIGHTING AT THE SOUTH KENSINGTON MUSEUM.

ON Tuesday evening the picture galleries of the South Kensington Museum were lighted for the first time by the Sun lamp which will henceforth be used for this purpose in lieu of gas. The plant used is composed of a 30 horse-power steam-engine, driving four alternating current Gramme machines, from which eight circuits of five lamps run to the galleries, lighting the two Jones bequest-rooms, seven out of the eight picture-rooms, and the reading-room. In the rooms containing the Jones collection where the lamps are placed low, the light is extremely pleasant and produces no fatigue to the eyes; and in the picture galleries, in which the lamps are suspended from the roof, the colours of the pictures are not at all affected, and the result shows the lamp eminently suited for such a purpose. In the reading-room the lamps are fixed in an inverted position, and the light is obtained by reflection from the walls and ceiling, which renders it soft and perfectly shadowless, thus enabling the visitors to read with comfort, and in any part of the room. The lamps used are each of 1,200 candle-power (estimated), and are fixed in lanterns with opal globes so constructed that they are perfectly noiseless. The light, which is a combination of the arc and incandescent light, is obtained by two carbon pencils which are inserted in a block of marble, a cavity in the latter being heated to incandescence by means of the arc formed. General satisfaction was expressed by the visitors present, and the numerous advantages of the lamp as compared with the gas jets employed in one portion of the galleries were very prominent.

THE SHREWSBURY SHIREHALL.

MR. J. M. LOCKWOOD, of Chester, the architect for the restoration of the Shirehall, has reported on the satisfactory progress made in the works. It will be recollected that after the fire which wrecked the old Shirehall, the outside walls were left comparatively uninjured, and these still remain as they were, but have been cleaned down, so as to match with the new portion in High Street. This latter front is built to correspond with that in the Square, and both are of the well-known Grinshill stone. The building has been very considerably enlarged. From High Street there is a new entrance for the prison van. Over this is an archway of stone, with the borough arms at the top. The principal entrance, that intended for the judges and members of the bar, is the old entrance-hall, which remains much as it did in the old time. After ascending the flight of steps in front, come the entrances for the members of the bar to the courts, and further on are new corridors and vestibules. The corridor is laid with mosaic, after the style of Roman work. At the far end of the corridor is the door leading to the hall-keeper's stairs. On the right and left are the judges' retiring rooms, and also the barristers' robing-room. In the ceilings of the corridor and judges' room are stained-glass lights, and both the judges' rooms and that for the barristers will be fitted up with pitch pine. Turning to the left from the judges' corridor is another smaller corridor, which leads to the grand jury room. Leading from this apartment is a corridor with a mosaic pavement, and out of this are the steps to the grand jury gallery inside the court. There are also retiring rooms for the jury and witnesses, and near all the retiring rooms referred to are lavatories and other conveniences. There are also apartments for the hall keeper, &c. The new mayor's court will be used for borough purposes, and for the police business of the county. The new Crown Court, which



is 52 feet long, 36 feet wide, and 34 feet high, is in the left wing of the building, and possesses—as will also the Nisi Prius Court—two principal entrances. The main door, and the one through which the judges will pass, is that in the centre of the Shirehall, while the witnesses, public, and others will be admitted by the door nearest to High Street. On either side of the court is a gallery, that on the right for juries in waiting, and the one on the left for the use of the grand jury. Immediately below the right-hand gallery is the jury-box, and the court is so constructed that the jury can gain access to their retiring-room from the jury-box without passing through the court, and therefore without running the risk of being interfered with, an inconvenience which they formerly had to submit to. Immediately opposite to the jury-box, and just below the left-hand gallery, is the witness-box, the crier's seat, and adjoining these the reporters' desks. The judge's seat is exactly midway between the witness and the jury. In the rear is the judge's retiring-room, 14 feet by 13 feet, lighted from the ceiling with a window of stained glass. On either side of the judge's seat are seats and desks for the judge's clerk and the high sheriff, and there is accommodation on the bench for about a dozen magistrates. Immediately below the bench are the seats of the associates and the solicitors' table, next to which are two rows of seats for members of the bar, there being accommodation for about twenty-four counsel. Behind the barristers' seats is the dock, and at each end are seats and desks for the governor of the gaol and a warder, and there is communication with the cells below by means of a flight of stone steps. On either side of the dock are four rows of seats for solicitors in waiting, and behind is ample room for persons interested in the cases for trial. In the extreme rear, 7 feet from the ground, is a spacious stone gallery for the accommodation of the general public. Along the front of the gallery is an iron railing, and the floor of it, as also other portions of the court, will be covered with linoleum. All the fittings of the court are of polished oak, while the ceiling is panelled with pine wood and coved, that being the best form for acoustic purposes. In the centre of the ceiling is a very handsome light, containing eight panes of stained glass, in the centre of each of which are the arms of county families. In the first pane, counting from the judge's seat, are the arms of the county of Salop, in the next those of the diocese of Lichfield, in third those of Roger de Montgomery, fourth Lord Hill, fifth Earls of Bradford, sixth E. Pemberton, seventh the Corbet family, and in the eighth the Kenyon family.

### AIX-LA-CHAPELLE CATHEDRAL.

**M. R. G. MAINWARING**, writing from Aix-la-Chapelle, says: A remarkably fine view of the Dom of Charlemagne is temporarily open through the rebuilding of some business premises. The view is from north-east, comprising the choir, with its lancets 85 feet high, the octagon of Karl, and some of the fine decorated northern chapels, and the new spire. The view from the south side is much obscured by trees, and defiled by an incongruous Ionic excrescence. The pending reconstruction of the shop will shut out this view by an erection parallel to and within 12 mètres of the choir, and touching a chapel which projects as a transept. London would not allow Westminster Abbey to be thus blocked in, whatever might be the cost of compensation. London has opened out, at great expense, St. Bride's, St. Martin's, St. Paul's, Westminster Hall, and many other historic edifices. Aachen Cathedral is the heritage of an area not limited by the German frontiers.

The public spirit evinced by Aix in conserving the Stadtwald, ten times the size of Hadley Wood, might well be evinced in rescuing the chief remaining historic monuments of this city. Indeed, it seems incredible that a community which has within the last twenty-five years erected the Marienkirche and St. Jacobs-kirche should permit its cathedral to be insultingly hidden by the desecration now proceeding.

### LEGAL.

**High Court of Justice.—Queen's Bench Division.**

**THE PATENT SILVERING COMPANY v. R. H. PADBURY,  
W. C. WARE, AND H. BURMAN.**

**LIGHT AND AIR CASE.**

This case was heard before Mr. Justice Stephen, it being contended by the plaintiffs that the erection of a skylight on a yard abutting on their premises had injured the light for their trade. The freeholder of the two properties had in granting a lease to the plaintiffs covenanted to make no erection which should interfere with the light of the premises.

The plaintiffs called several witnesses engaged in the trade to support the injury, and also Mr. J. D. Mathews, surveyor. For the defendants the witnesses were Banister Fletcher, A. Peebles, W. W. Groyther, and J. Gibson. Mr. Justice Stephen went to view the premises and the skylight, and on returning gave his verdict for the defendants.

### REVIEWS.

**A PRACTICAL TREATISE ON THE STRENGTH OF MATERIALS, INCLUDING THEIR ELASTICITY AND RESISTANCE TO IMPACT.**  
By **THOMAS BOX**. Published by E. & F. W. Spon.

The books which Mr. Box has written on heat, hydraulics, &c., have been recognised as standard manuals on their subjects. The bulky volume by him on "The Strength of Materials" is likely to become of more general use. The author has many qualifications for the task he has undertaken. He neither accepts with submission the results of other inquirers nor tries to supersede them. His office, as he interprets it, is that of a judge, and he endeavours to derive all the good he can from previous researches, but in the first place he must be satisfied of their accuracy. In describing how he compiled his book he tells us that "every rule has been subjected to the test of experience, almost every available experiment having been examined and compared therewith, the error, or rather the difference per cent. between the rule and experiment being given in each case. When the theoretical laws did not bear that test, they were relentlessly modified or abandoned altogether in favour of empirical rules, whose accuracy was proved by experiment although they did not admit of a theoretical demonstration."

The manner in which Mr. Box deals with the subject will be inferred from the order of the chapters, which is as follows: Tensile strain, rivetted joints, cohesion applied to pipes, strength of chain, ropes, &c.; shearing strain, crushing strain, strength of pillars, connection of pillars with transverse strains, wrinkling strain, transverse strain, "Similar" beams, connection of transverse and other strains, roofs, torsional strain, extension and compression, deflection of beams, torsional elasticity, modulus of elasticity, permanent set, impact, collapse of tubes, factor of safety, and fatigue of materials.

The information which is given under these heads is derived from the experiments of Hodgkinson, Clarke, Kirkaldy, and others, and from the way in which it is presented by Mr. Box it obtains fresh interest. It sometimes would appear that in engineering books the aim of the author is simply to construct neat formulæ, and facts are made to further that end in a marvellous way. Mr. Box does not believe in sacrificing truth to mathematics. If things do not appear to be resolvable he says so plainly, and does not attempt to reduce them. "It is impossible," he says in one place, "to give general ratios for the strength of pillars of different materials, which will be correct for all diameters and lengths. Mr. Hodgkinson has given a series of numbers as the ratios of strength for cast-iron, wrought-iron, steel, and timber pillars, but these are simply misleading, for if they are correct for a particular diameter and length they must of necessity be incorrect for all other dimensions." This extract will indicate the spirit of the book and the independence of the author. His desire is to give information that will be useful in practice, and which accordingly must be trustworthy. Problems which are outside practice are left to physicists and mathematicians to determine. The book is clearly arranged, and must be commended as a valuable addition to professional literature. The diagrams are well lithographed, but if they had been introduced in the text, instead of in plates at the end, the references to them would have been less troublesome.

**LETT'S POPULAR ATLAS.** Complete Edition. Published by Letts, Son & Co., Limited.

According to Cardinal Newman there cannot be a nobler, wider, or more philosophical subject than geography. It runs, he says, collaterally with the history of the crust of the earth or geology on the one hand, and with the history of the human race on the other, and it is difficult to hinder it from embracing ethnology and the philosophy of the relations between human nature, physical and moral, and the material dwelling-place where man passes the probationary portion of his existence. But it is only in Germany that the manifold relations of geography are studied as a necessary branch of education, and as carefully as they deserve. In England, ignorance of the subject is often exhibited by our public men in a way which is as amusing as the amazement of an English Premier in the last century when he heard that Cape Breton was an island. One of the causes which has prevented people from having accurate notions of the subject has been the scarcity of cheap and good atlases. Long ago the Useful Knowledge Society tried to supply the deficiency. The maps were excellent and cheap, but the sixpenny sheets were uncoloured. A coloured sheet was a shilling at least, for in those days there was no colour printing, and copies had to be tinted by hand. When a map is plain it does not strike the eye sufficiently to impress geographical facts upon the mind, and so many things have now to be shown in colour on a map that hand work has become useless for the purpose. What can be done by colour printing, as a means of producing a cheap and elaborate atlas, is exemplified in the "Popular Atlas" of Messrs. Letts, Son & Co., Limited. When the price, the quantity, and quality of the work are considered the volume is a marvel. It contains 156 double-page maps, an exhaustive index of 23,000 names, and is sold for two guineas, or at the rate of about 3d. a map. All the countries of the world are shown according to the latest authorities; there are twenty-seven maps of England, Scot-



land, and Ireland, showing geology, watersheds, &c., and plans of the principal cities in the world. There are twelve sheets for India. Where the oceans appear the depths are given, and if there is a vacant corner on a map it is filled with statistics or other information. Several astronomical charts are also included. The atlas represents an enormous amount of labour in its preparation, and could not have been produced without a large expenditure of money. How it is to repay the publishers is not clear. The atlas is adapted for the counting-house as well as the library. The trade routes, lighthouses, &c., are laid down, and the places where British consuls, vice-consuls, or agents are stationed are distinctly marked. It should find a place in all English merchants' offices throughout the world, and for general reference it is invaluable.

THE BIBLIOGRAPHER: A JOURNAL OF BOOK LORE. Vol. III. Published by Elliot Stock.

The world of books, which, according to the poet, is both real and good, is the subject of the monthly "Bibliographer;" everything relating to books, their binding, title-pages, errata, printers, publishers, is treated as if they were of equal importance with political events. Sometimes the writers even condescend to refer to the authors. The "Bibliographer" is a most fascinating periodical. One curious error is noted. It is by a Birmingham bookseller, who under the head of "Architecture" has placed "Le Pâtissier Pittoresque." But this is excusable, for the work contains 425 plates of pavilions, rotundas, temples, ruins, &c.

### ART WORKMANSHIP.

**Stained Glass.**—A two-light window executed by Messrs. Wailes & Strang, of Newcastle-on-Tyne, has just been erected in Storrington Church, Sussex. The window has been designed as a memorial of the late Charles J. Farnham, who died at Rome, at the early age of twenty, on January 30 last, and has been erected by friends and fellow-pupils. The subjects represented are the Baptism in the Jordan and the Last Supper. The work has been executed in the best style of the firm. The essential characteristics of Early English have been followed, but according to request the expressions and action of the figures has been rendered in a natural manner, avoiding all grotesqueness or other conventionalism. A large brass placed under the window is devoted to the memorial inscription.

### NEW BUILDINGS.

**Bolton.**—The plans for twenty-eight new dwellings about to be erected in the Haulgh by the trustees of Dr. and Mrs. Chadwick's charities in lieu of those in Peabody Street, sold to the London and North-Western Railway Company, have been prepared by Mr. Simpson, architect, of Acresfield, Bolton.

**Canterbury.**—The London and County Banking Company Limited, intend to rebuild the premises on the Parade, where the business of the Canterbury branch has been carried on for so many years. The building, which is estimated to cost about 8,000*l.*, will be erected from the designs of Mr. J. G. Hall, city surveyor of Canterbury.

**Cardiff.**—A large horse repository, with stalls for 100 horses, carriage show-rooms, shoeing forge, covered yard for sales and riding-school, offices, saddler's shop, &c., was recently opened in Cardiff, having been erected on a site near the Great Western Railway Station, for Messrs. Gottwaltz, Bowring & Hughes. Messrs. W. D. Blessley & Aspinall, of Cardiff, were the architects, and Mr. W. White, of Swansea, the contractor.

**Dudley.**—The foundation-stone of the buildings for the Dudley Free Library and School of Art has been laid. The works are being carried out by Messrs. Webb & Round, builders, Dudley, under the superintendence of Mr. J. J. Bateman and Mr. B. Corser, architects, Birmingham, whose plans were selected in limited competition.

**Hyde.**—The foundation-stone has been laid of a new town hall, at Hyde, Lancashire. The architect is Mr. J. W. Beaumont, Manchester, whose design was selected in competition. The contractor is Mr. Samuel Robinson, builder, of Hyde.

**Kirkcaldy.**—The memorial-stone of a public hall at Pathhead, Kirkcaldy, has been laid. The hall occupies a position in the leading street of Pathhead. Seating accommodation will be provided for 800, though the hall is capable on an emergency of holding 1,000. The plans were prepared by Messrs. Campbell, Douglas & Sellars, Glasgow, who have chosen the simple Classical style prevailing in Scotland during the seventeenth century. Besides the hall proper, a reading-room, library, billiard-room, and other accessories have been provided. The total cost of the building is estimated at 3,560*l.*

**Stainland.**—The memorial-stones of the Stainland Mechanics' Hall have been laid. It is being erected from the designs and under the superintendence of Messrs. Leeming & Leeming, architects, of

Northgate Chambers, Halifax. The builders are Normanton & Whiteley, of Stainland, masons; A. Park, of Stainland, joiner; S. Collins, of Sowood, plasterer and slater and painter; J. Naylor, of Halifax, plumber, &c.; Taylor & Parsons, of Bradford, white-smiths; and Rodgers & Roberts, of Holywell Green, carvers. The contracts amounted to 1,816*l.* 12*s.*, exclusive of cost of land, furniture, &c.

**Whitby.**—A residence for Mr. William Wright is now being erected in Upgang Road, Whitby, from the designs of Messrs. Perkin & Bulmer, of Leeds. The materials are red New Holland bricks with stone dressings, and timber gables filled in with brick and cemented on face, and covered with green Welsh slating. The stables are completed, and consist of carriage and wash-houses, saddle-room, hay and corn chamber, two stalls, and two loose boxes.

Premises specially planned to suit the requirements of Mr. Charles Fisher's business in Silver Street, Whitby, are now completed, and consist of plumber's shop, office, and warehouse three storeys high, with residence, yard, &c. The builder was Mr. John White, of Whitby, and the architects Messrs. Perkin & Bulmer, Leeds.

Four houses in the half-timbered style, and two cottages adjoining in Stakesby's Vale, Whitby, have been recently erected from the plans of Messrs. Perkin & Bulmer, Leeds, for Mr. William Wright.

**York.**—The new premises in Davygate, for Mr. Alderman Melrose, are now completed. The building is faced with New Holland pressed red bricks and Tadcaster stone dressings. The ground floor consists of wine merchants' offices and two shops. The first and second floors are occupied as offices and house-keeper's apartments, &c. The whole of the shops and offices are let and occupied. The building has been carried out by Mr. William Biscomb, contractor, York, from drawings prepared by Messrs. Perkin & Bulmer, architects, Leeds.

### CHURCH BUILDING AND RESTORATION.

**Appleby.**—The village church of Appleby has been reopened after restoration. The style of the building is of the Decorative period. In the course of the work the tower has been heightened and a new entrance-porch built. The architect was Mr. Crowther, of Manchester, and the contractor, Mr. Hopkinson, of Retford.

**Benfieldside.**—Works of extension have been completed at the parish church, comprising a south aisle and shallow transept, 61 feet by 13 feet, providing seats for 111 adults. The organ-chamber, 17 feet by 14 feet, has a lofty arch opening into transept, and double arches next the chancel, with corresponding arches opposite. By this means seats for forty adults and boys are obtained. A choir vestry has also been added at the south-west side of the church. The works generally have been carried out by local tradesmen of Shotley Bridge and Blackhill. The cost, exclusive of private gifts, will be about 1,650*l.* Mr. J. W. Walton-Wilson is the architect.

**Birkenhead.**—A chancel and side chapel which, with a tower, have been added to St. Peter's Church, have been opened. The structure, as now completed, containing a total accommodation of 838 sittings, consists of a nave with side aisles, 76 feet long and 54 feet wide, with sitting accommodation for 739; a morning chapel, 27 feet by 21 feet on the north side, providing accommodation for 60; a large chancel, 31 feet by 24 feet, with apsidal end, contains choir stalls for 39; and there is a tower on the south side containing an entrance portal and clergy vestry, with organ chamber overhead, opening into the chancel. The choir vestry is arranged on the basement floor. The materials used are red brick, with moulded brick decorative features, freestone being but sparsely used; it is dependent for architectural effect upon its proportion and treatment. The walls of the chapel, as also the chancel, are wholly finished in brickwork, the moulded strings, shafts, and other decorative features being executed by the New Ferry Brick Company. In style the first erected portion of the works are of an emphasised Early French character, and the last completed works have been designed to accord therewith, and the tower, which is 19 feet square, rises to a height of 130 feet from the street level to the top of the vane. The works have been executed by Mr. W. H. Forde, of Birkenhead; the heating and gasfitting by Mr. Henry Thompson, of Birkenhead, and the window glazing by Messrs. Forrest, of Liverpool. The works have been designed and superintended by Mr. David Walker, architect, Liverpool.

**Chorley.**—A new church is being erected at Adlington, from designs by Messrs. T. D. Barry & Son. The church, when completed, according to the plans, will consist of chancel, 32 feet by 23 feet; nave, 82 feet by 25 feet; north and south aisles, 82 feet by 10 feet 6 inches; north and south transepts, 21 feet by 14 feet; organ-chamber at the north-east, 18 feet by 15 feet; clergy vestry, 12 feet by 11 feet 6 inches; choir vestry, 12 feet 6 inches by 13 feet 6 inches. These are at the south-east, and can be thrown into one



when required. The tower is placed in the second bay of the south aisle, and the principal entrance is through it.

**Harpurhey.**—The memorial-stones of a new Wesleyan chapel have been laid. The chapel will be built in Renaissance style, having a tower at one angle, rising to the height of 80 feet, in which will be placed extraction coils and shafts to assist the ventilation. The heating will be by means of hot water on the low-pressure principle. The architects are Messrs. William Waddington & Son, of Cross Street, Manchester, and the contractor is Mr. James Macfarlane, of Churnett Street.

**Holloway, Derbyshire.**—Memorial-stones of a new Primitive Methodist chapel were laid at Holloway on Wednesday, the 4th inst. It is picturesquely situated on the side of the hill, with foliage abounding all around, and the architect—Mr. John Wills, of Derby—has designed it after the Old English, with timbered gables. It is in close proximity to Leahurst, the residence of Miss Nightingale, and will form a conspicuous feature in one of the most beautiful of Derbyshire valleys. The chapel will seat 250 persons. Mr. B. Askew, of Matlock Bridge, is the contractor.

**Llandyssil, S. Wales.**—A new Unitarian chapel is being erected here after designs by Mr. John Wills, of Derby. It stands on an excellent site, and will be the best architectural feature of the place. The front will have a mullioned window, with twelfth century tracery, and a tower rises over the porch. The glazing will all be in cathedral rolled glass, and the internal fittings of pitch pine. The contractor is Mr. Watkin Davies, of Llandyssil.

**Narborough.**—The church of All Saints, Narborough, has been reopened after restoration. Mr. Bacon was the architect, and Mr. J. Clifton acted as clerk of works. The wrought-iron chancel screens were supplied by Mr. Burbidge, of Leicester; the chancel-gates and altar-rail standards by Mr. Barford, of Maidenhead; memorial brasswork by Messrs. Hart, Son, Peard & Co., of London. The masons were Messrs. Thrall & Payne, Leicester; the joiner-work was executed by Mr. Stirk, of Leicester; and the granite walling by Messrs. Langton, of Enderby.

**Old Lenton, Notts.**—A new Primitive Methodist chapel was opened on the 5th inst. It seats 350 adults, and has school-rooms and class-rooms for 200 children. The style is Eleventh Century English, and is carefully treated throughout. Very complete provision is made for opening the class-rooms into the school-room, and also for the usual modern requirements. The cost of the building is 1,500*l.* The architect is Mr. Wills, of Derby, and the contractors Messrs. Savage & Attewell, of Nottingham.

**Preston-on-Wye.**—The church of St. Lawrence has been reopened after restoration. The work has been carried out under the direction of Mr. T. Nicholson, diocesan architect, Hereford. The contractors were Messrs. Davies & Hiles. The cost of the work has been about 1,400*l.*

**Sal.**—The new church of St. Paul's was opened on the 30th ult. The style is Early English, and the building has been erected under the direction of Mr. H. R. Price, architect, Manchester, by Mr. J. Herd, contractor. Accommodation has been provided for 700 worshippers. The cost of the work amounts to 5,000*l.* The tower has not yet been erected. Internally the church consists of nave, two side aisles, and chancel.

## ARCHÆOLOGY.

**The French Archæological Society**, founded in 1853 by M. A. de Caumont, is about to celebrate its long course of useful work by a general congress at Caen, on July 16. In addition to the usual business of such annual meetings and to visits paid to the monuments abounding in Caen, and also to an excursion on the 19th to Bayeux, the programme of operations contains a novel and attractive feature in a three days' excursion, to commence on the 23rd inst., from Granville to Jersey, where the French Archæological Society will be received by Colonel Le Cornu, President of the Société Jersiaise.

## GENERAL.

**Mr. C. R. Gribble** has been appointed architect to the National Provincial Bank of England.

**The Honorary Degree of LL.D.** has been conferred, by the University of Cambridge on Mr. G. F. Watts, R.A., and on Mr. R. Stuart Poole, keeper of coins and medals at the British Museum.

**The President and Council of the Royal Academy** gave their annual conversation on Wednesday evening. The guests were received by Sir Frederick Leighton, who has now recovered from his recent indisposition.

**An Evening Fête** will take place at the International Fisheries Exhibition on the 18th inst., at nine o'clock, under the special patronage of their Royal Highnesses the Prince and Princess of Wales, in aid of the funds for the erection of an English church in Berlin.

**Professor Anton von Werner**, Director of the Royal Academy, Berlin, was taken ill while painting in his studio, and has been ordered absolute repose.

**Mr. W. Tanner**, of Newport, has been appointed surveyor for the county of Monmouthshire. There were 114 applicants for the post.

**The Weston-super-Mare Town Commissioners** have sanctioned plans for the erection of a new promenade pier over a mile in length, to cost 70,000*l.* This scheme, together with that for a new sea front, will involve an expenditure of 100,000*l.*

**Messrs. Debenham, Tewson, Farmer & Bridgewater** ask us to state that they are the agents concerned in the sale of Devizes Castle, to which attention was drawn in our columns of Saturday last.

**A Portrait** of the late Admiral of the Fleet, Sir James Hope, G.C.B., painted by Mr. Sydney Hodges, has just been placed in the Nelson Room of Greenwich Hospital. It has been subscribed for by numerous friends and followers of this distinguished naval officer.

**A Sanatorium** for foreign cattle is to be constructed at St. Lawrence, Newcastle-on-Tyne, at an estimated cost of 8,880*l.*

**When the Vote for the British Museum** is proposed in Committee of Supply, and the House is asked to agree to an expenditure of 45,000*l.* for the purchase of the Stowe portion of the Ashburnham manuscripts, exception will be taken by some honourable gentlemen below the gangway at the Ministerial side of the House to the application of public money for the purpose.

**The Trustees** of the Middlesbrough High School have decided to proceed with the erection of the east wing, and to solicit subscriptions for the purpose. Mr. Alfred Waterhouse, A.R.A., is the architect, and the estimated cost of the work is 6,500*l.*

**The National Health Society** have awarded a silver medal—the highest award—to Messrs. William Woollams & Co. for their artistic wall papers, free from arsenic.

**Ventilation of the Cork Exhibition.**—Messrs. Robert Boyle & Son's, 64 Holborn Viaduct, E.C., and Glasgow, patent self-acting air-pump ventilators are applied for the ventilation of the International Exhibition at present being held in Cork.

**The Work** of demolishing the old fortifications of Calais, and filling in the deep fosses which surround that town, are now being actively proceeded with. The total estimated expenditure on the undertaking is 600,000 frs. The work, together with the important harbour works which are being rapidly pushed forward in Dover, is destined to effect an important change in the history of this ancient town.

**The Anniversary Meeting of the Sanitary Institute of Great Britain** was held at the Royal Institution, Albemarle Street, on Thursday. The chair was taken by Professor Humphry, M.D., F.R.S., and an address was delivered by W. Eassie, C.E., F.L.S., F.G.S., entitled "The Relationship between Geology and Sanitation." The medals and certificates awarded to the successful exhibitors at the exhibition at Newcastle, in 1882, were presented at the meeting.

**The London Sanitary Protection Association** are to hold a meeting in the Kensington Town Hall on Tuesday, the 17th inst., at 8.30 P.M., at which the newly-elected president, the Duke of Argyll, will take the chair for the first time, and will deliver an address upon this subject. Tickets can be obtained gratis on application to the secretary of the association at its office, 1 Adam Street, Adelphi.

**Artisans' Dwellings.**—The Industrial Dwellings Company, of which Sir Sydney Waterlow, M.P., is chairman, has acquired from the Metropolitan Board of Works over an acre of land in Soho, having frontages to the new street from Charing Cross to Oxford Street, on which nearly a thousand rooms will be erected. Up to the present time this company has provided for the accommodation of about 25,000 persons of the working classes in various parts of London.

**Exhibition of Christmas Cards.**—The organisers of the forthcoming Printers' Exhibition at the Agricultural Hall are arranging for a comprehensive display of designs for Christmas, New Year, birthday, and other congratulatory cards, and of paintings in oil and water-colour, etchings, &c., of a nature suitable for cheap reproduction and sale by stationers. No limit is assigned to the number of designs to be admitted, but the manager reserves to himself the right to exclude contributions which do not satisfy a fair standard of merit. Exhibits must not reach the hall later than the 25th inst.

**Building Societies' Protection Association.**—At a meeting of the executive committee of this association, the following resolution was unanimously adopted: "That, in the opinion of this meeting, it is desirable that the attention of building societies generally should be called to the heavy ground rents to which comparatively small houses are frequently liable, especially in the suburbs of the metropolis; and that, unless in exceptional cases, advances should not be made on property where the ground rent exceeds one-sixth of the estimated rack rental."



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, JULY 14, 1883.

### COMPETITIONS OPEN.

**BELFAST.**—Aug. 1.—Designs are invited for proposed Public Library. Premiums of £100, £50, and £25. Mr. Samuel Block, Town Clerk, Town Hall, Belfast.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**BURNLEY.**—July 31.—Designs are invited for the Erection of a Hospital. Premiums of £100, £30, and £20. Mr. Joshua Rawlinson, Hon. Secretary, Burnley and District Hospital, Burnley.

**NEWCASTLE-ON-TYNE.**—July 30.—Designs are invited for a Hospital for Infectious Diseases to be built on a Site near Heaton Junction. Subject to certain conditions, the successful Architect will have the carrying out of the work, and a premium of 50% will be divided between the second and third competitors. Mr. Hill Motum, Town Clerk, Town Hall, Newcastle-on-Tyne.

**STAINES.**—July 21.—Sketch-plans are required for a Hospital for Infectious Diseases. Mr. John Anthony Engall, Clerk to the Staines Joint Hospital Board, Staines.

### CONTRACTS OPEN.

**ABBEY TOWN.**—July 30.—For Building Dwelling-house, &c. Mr. John Cullens, Highlows, near Abbey Town, Holme Cultram.

**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

**ARDLAMONT.**—July 20.—For Rebuilding March Dyke. Mr. William Cowan, Ardlamont-by-Greenock.

**ASTON BOTTERELL.**—For Restoration of Church Tower. Rev. E. F. Lipscomb, Rectory, Aston Botterell, Bridgnorth.

**AUDENSHAW.**—July 21.—For Four Class-rooms. The Vicar, Audenshaw.

**BARROW-IN-FURNESS.**—July 30.—For Building Hospital. Messrs. Payle & Austin, Architects, Barrow.

**BELFAST.**—July 19.—For new Wing to Public Baths. The Borough Surveyor, Belfast.

**BELFAST.**—Aug. 6.—For Building Post-office. The District Engineer, Post-office, Belfast.

**BICTON.**—July 20.—For Range of Farm Buildings at the Asylum. Mr. T. Groves, County Surveyor, The Priory, Shrewsbury.

**BIRMINGHAM.**—July 21.—For Building Liberal Club. Mr. J. A. Cossins, Architect, Warwick Chambers, Corporation Street, Birmingham.

**BRADFORD.**—July 16.—For Extension of Undercliffe School. Mr. E. P. Peterson, Architect, New Inn Buildings, Thornton Road, Bradford.

**BRIDGEND.**—For Heating Apparatus and Gas Fittings to Chapel. Mr. J. F. Fawckner, Architect, Newport, Mon.

**BURSLAM.**—July 16.—For School Buildings for 300 pupils, Middleport. Mr. G. B. Ford, Architect, Burslem.

**CAMBRIDGE.**—July 16.—For Construction of a Building for the Enlargement of the Guildhall. Mr. Edmond Foster, Town Clerk, Guildhall, Cambridge.

**CANTERBURY.**—July 16.—For Additions to Middle Schools. Mr. J. G. Hall, Architect, 8 St. Margaret Street, Canterbury.

**CARLISLE.**—For pair of Semi-detached Villas. Mr. G. D. Oliver, Architect, Bank Chambers, Carlisle.

**CARLTON COLVILLE.**—July 26.—For Building Church. Mr. George Glover, Architect, Lowestoft.

**CHELTENHAM.**—July 23.—For Construction of Water-works. Mr. J. F. Bateman, 16 Great George Street, Westminster.

**CHESTERTON.**—July 16.—For Group of Schools and Caretaker's House. Mr. G. B. Ford, Architect, Burslem.

**COLWYN BAY.**—July 26.—For Construction of Sea-wall, Breckwater, &c. Mr. L. Booth, Architect, 88 King Street, Manchester.

**COVENTRY.**—July 20.—For Building Pair of Cottages, Old Fillongley Hall Farm. Mr. W. Tomlinson, Architect, Hertford Street, Coventry.

**CROOK.**—For Building Twenty-five Cottages. Peases' West Colliery Offices, near Crook.

**DUBLIN.**—July 17.—For Erection of Stables and other Buildings. Mr. D. J. Freeman, City Architect, 34 Dawson Street, Dublin.

**DUNDEE.**—July 23.—For Building Goods Shed, Store, Offices, Boiler, Engine, and Weigh-houses, &c. Mr. Barr, Resident Engineer, Northern Division, Caledonian Railway, Perth.

**EARLSDON, COVENTRY.**—July 27.—For School and Offices thereto. Mr. William Tomlinson, Architect, Coventry.

**ECCELSHALL.**—July 28.—For Building Brick Bridge at Cold Mecca. Mr. R. Griffiths, County Surveyor, Stafford.

**EMBLETON.**—July 16.—For Works to Church. Mr. G. Watson, Architect, 8 St. Andrew's Place, Penrith.

**ETON.**—July 25.—For Building Hospital. Plans, &c., at the Local Board Office, High Street, Eton.

**EXETER.**—August.—For Building Asylum to Accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect, 14 Farnival's Inn, E.C.

**FEATHERSTONE.**—July 23.—For Erection of Two Schools, School-house, supplying Flags and Kerb-stones, Sanitary Tubes and Pipes, making Causeways, Drains, &c. Mr. Robert Brown, West View, South Featherstone, near Pontefract.

**GARTHRORPE.**—July 17.—For Enlargement, Re-pewing, and Painting Chapel. Mr. J. Chambers, George Street, Old Goole.

**GOLDENHILL.**—July 16.—For Erection of Schools for 800 Children, with Caretaker's House. Mr. G. B. Ford, Architect, Burslem.

**GOSFORTH.**—July 16.—For Building Sunday Schools. Mr. E. Shewbrooks, Architect, 2 Market Street, Newcastle-on-Tyne.

**HALTWHISTLE.**—July 20.—For Building Wesleyan, Methodist Chapel at Coanwood. Mr. Joseph Shields, Architect, Sunderland.

**HALWILL.**—July 20.—For Building Railway Hotel. Messrs. Packham & Croote, Architects, 93 Paris Street, Exeter.

**HEBDEN BRIDGE.**—July 14.—For Building Schools, Board Room, Caretaker's House, Boundary Walls, &c. Mr. John Sutcliffe, Architect, Romfield Buildings, Todmorden.

**HEREFORD.**—For Building a Small House. Mr. W. W. Robinson, Architect, King Street, Hereford.

**HESTON.**—For Building a Villa. Messrs. Fairbank & Wall, Architects, 155 Swan Arcade, Bradford.

**HOLBECK.**—July 14.—For the Erection of Five Houses, in Stead Street and Braithwaite Street. Messrs. Wilson & Bailey, Architects, 35 Park Square, Leeds.

**HORBURY.**—For Erection of a Wesleyan Chapel. Mr. Walter Hanstock, Architect, Branch Road, Batley.

**HUDDERSFIELD.**—July 18.—For Widening Railway and Construction of Second Tunnel at Springwood. Drawings and Specification at the Engineer's Office, Euston Station.

**ILKESTON.**—July 18.—For Erection of House with Shop and Outbuildings. Mr. George Rigley, Granby Street, Ilkeston.

**JARROW-ON-TYNE.**—July 14.—For Building Congregational Schools. Mr. T. Southron, Architect, 70 King Street, South Shields.

**LEAMINGTON.**—July 23.—For Building Two Schools for 300 Girls and 400 Infants. Mr. C. I. Blaker, 5 Church Street, Leamington.

**LEATHERHEAD.**—July 19.—For Building Schools to accommodate 300 Children. Mr. Haynes, Leatherhead.

**LIVERPOOL.**—July 23.—For Building Thirteen Blocks of Five-storey Artizans' Dwellings. Mr. J. D. Fisher, City Engineer's Office, Liverpool, W.

**LONDON.**—July 23.—For Surrey Gardens Mission Room. Messrs. Romaine-Walker & Tanner, Architects, 19 Buckingham Street, Adelphi, W.C.

**MASBROUGH.**—July 17.—For Building Two Houses. Mr. W. Scattergood, Architect, Rutland Street, Notting ham.

**MIRFIELD.**—July 18.—For Building Two Dwelling-houses and Six Cottages. Mr. Fred. Milner, Architect, Lowlands, Mirfield.

**MOSSLEY.**—For Building Shop, House, and Three-stalled Stable. Mr. Tom Cook, Architect, 8 Victoria Buildings, Victoria Street, Manchester.

**MOTTISFONT.**—July 16.—For Building Farmhouse and Offices. Messrs. Westbury & Son, Andover.

**NEWPORT.**—For Building Baptist School and Class-rooms. Messrs. W. G. Habershon & Fawckner, Architects, Park Square, Newport, Mon., and 38 Bloomsbury Square, W.C.

**NOTTINGHAM.**—For Building Two Lace Warehouses. Messrs. S. Dutton Walker & Howitt, Architects, King John's Chambers, Bridlesmith Gate, Nottingham.

**OSSETT.**—July 18.—For Building Central Stores. Mr. Henry Holton, Architect, Bond Street, Dewsbury.

**OVER DARWEN.**—July 26.—For Building Church and School. Messrs. Pugin & Pugin, Architects, 111 Victoria Street, Westminster, S.W.

**PENDLETON.**—July 18.—For Building Public Baths. Mr. Laurence Booth, Architect, 88 King Street, Manchester.

**PONTYGWAITH.**—For Building Ten Dwelling-houses. Mr. Stephen Williams, Pontygwaith, near Pontypridd.

**QUEENSBURY.**—July 19.—For Additions to Warehouse. Mr. H. Hodgson, Architect, 68 High Street, Queensbury.

**SELBY OAK.**—July 16.—For Repairs to Workhouse. Mr. G. Ingall, Architect, Temple Row West, Birmingham.

**SLATTHWAITE.**—July 23.—For the Erection of a Police Station. Mr. J. Vickers-Edwards, West Riding Surveyor, Wakefield.

**SOUTHAMPTON.**—For Rebuilding Mill. Mr. Henry Stride, Nursing Mill, near Southampton.

**ST. ALBANS.**—For Building Two Small Villas. Messrs. H. Rose & Son, Vernham Road, St. Albans.

**STECHFORD.**—July 17.—For Building Laundry, House, Coach-house, &c. Plans at the Estate Office, New Street Station, Birmingham.

**ST. HELENS.**—July 24.—For Alterations to Congregational Chapel. Messrs. Picton, Chambers & Bradley, Architects, 11 Dale Street, Liverpool.

**SWANSEA.**—July 14.—For Building Residence. Messrs. James, Seward & Thomas, Architects, Wind Street, Swansea.

**TIPTON.**—July 19.—For Alterations to Great Bridge Schools. Mr. E. Richards, Owen Street, Tipton.

**TONGWYNLAIS.**—July 21.—For Enlarging, &c., Baptist Chapel. Rev. J. Thomas, Tongwynlais.

**WALSALL.**—July 18.—For Building Schools in Milton and Sun Streets, Palfrey. Mr. S. Loxton, Architect, Park Street, Walsall.

**WEST FELTON.**—July 17.—For Building Stores, Warehouse, Dwelling-houses, Stables, &c. Mr. W. Lister Newcombe, Architect, 89 Pilgrim Street, Newcastle-on-Tyne.

**WOLVISTON.**—July 19.—For Building an Eight-roomed House. Mr. R. Feren, 28 Market Place, Durham.

**WORKINGTON.**—For Building Six Houses, Westfield. Mr. S. P. Jones, 3 Westfield, Harrington Road, Workington.

**YORK.**—July 29.—For Building Post Office. H.M. Office of Works, Albion Place, Leeds.



## TENDERS.

## BATLEY.

For Building Wesleyan Chapel, Purlwell, Batley. Mr. Geo. A. Fox, Architect, Batley. Quantities by the Architect.

*Accepted Tenders.*  
Robinson, mason.  
Chadwick & Sons, joiner.  
Walshaw, plumber.  
Crawshaw, plasterer.  
Thornton, slater.  
Total amount, £2,400.

## BERKHAMPTSTEAD.

For Building Tramp Wards at the Workhouse, Berkhamstead. Mr. W. HUCKVALE, Architect.

Austin	£628	7	0
Honour & Son	505	15	0
Monk	500	0	0
Nash	490	0	0
FINCHER (accepted)	456	0	0

## BURTON-ON-TRENT.

For Enlarging of Horninglow School and Erection of Caretaker's Residence for the Burton-on-Trent U. D. School Board. Messrs. GILES & BROOKHOUSE, Architects, Derby. Quantities by the Architects.

Wildman	£1,953	17	0
Stevenson & Son	1,785	0	0
Hunter	1,781	0	0
Hodges	1,740	0	0
Maddocks	1,707	0	0
Wileman	1,700	0	0
Mellor	1,674	0	0
Wheeldon	1,670	0	0
Wigley	1,645	5	0
De Ville	1,620	0	0
West	1,616	10	0
CHAMBERLAIN BROS., Burton (accepted)	1,600	0	0

For Enlarging Winhill Board School and Erection of Caretaker's Residence for the Burton-on-Trent U. D. School Board. Messrs. GILES & BROOKHOUSE, Architects, Derby. Quantities by the Architects.

Wildman	£2,024	3	11
Earp	1,855	1	5
Hunter	1,810	0	0
Mellor	1,748	5	0
Mason	1,744	0	0
Wileman	1,720	0	0
Maddocks	1,717	0	0
Wigley	1,685	5	0
Hodges	1,680	0	0
Wheeldon	1,670	0	0
Chamberlain	1,650	0	0
DE VILLE (accepted)	1,650	0	0
Eaton	930	0	0

## COVENTRY.

For Taking Down and Rebuilding the Bridge over the Sherbourne, near the Sewage Works, Coventry.

Hilton & Sons	£216	0	0
Frith	178	0	0
GARLICK (accepted)	165	0	0

## FARNWORTH.

For the Erection of Congregational Chapel at Farnworth, near Bolton. Mr. JOHN WILLS, Architect, Victoria Chambers, Derby. Quantities by the Architect.

Norris & Sons, Bolton	£2,890	0	0
Taylor, Bolton	2,750	8	0
Neill & Son, Manchester	2,750	0	0
MUNKS, Hucknall (accepted)	2,470	0	0

## FYFIELD.

For Building Truants' Home for 80 Boys, Fyfield. Mr. J. T. NEWMAN, Architect, 2 Fen Court, E.C. Quantities by Messrs. R. L. Curtis & Sons.

Ede	£13,099	0	0
Robson	12,227	0	0
Hearle & Son	11,882	0	0
White	11,005	0	0
Hack	10,896	0	0
Wells	10,789	0	0
Brown	10,786	0	0
Hosking	10,678	0	0
Parrish & Hawker	10,669	0	0
Morter	10,567	0	0
Reed	9,987	0	0
Gregar	9,683	0	0
Hobbs	9,018	0	0

## HEMSWORTH.

For Erection of House, Out-offices, Stables, &c., and Altering other Buildings, Moor Top Farm, Hemsworth, for Mr. W. H. Leatham, M.P. Mr. WILLIAM RICHARDSON, Architect. Quantities by the Architect.

Carr, Hemsworth, excavator, bricklayer, and mason.  
Lloyd, Wakefield, carpenter and joiner for house.  
W. E. Longbottom, Hemsworth, carpenter and joiner for farm buildings.  
Season, Leeds, slater.  
Johnson, Leeds, plumber and glazier.  
Branton, Leeds, plasterer.  
F. J. Longbottom, Hemsworth, painter.  
Total amount, £1,266 15s.

## HOLLOWAY.

For Building Primitive Methodist Chapel at Holloway, near Cromford. Mr. JOHN WILLS, Architect.

Walker & Sons	£725	0	0
Wheeldon Bros.	690	0	0
Wildgoose	679	0	0
ASKREW (accepted)	640	0	0

## HINDRINGHAM.

For Restoration of North Aisle and Chapel, Hindringham Church, Norfolk. Mr. HERBERT J. GREEN, Architect, Norwich.

Beaver	£985	7	0
Chapman	900	18	6

## HULL.

For the Erection of Ship Chandler's Shop, Warehouse, Offices, &c., for Messrs. F. & T. Ross, Hull. Mr. JOHN WILLS, Architect, Victoria Chambers, Derby. Quantities by the Architect.

Jackson & Son	£1,781	0	0
Musgrave	1,465	0	0
Morrell	1,452	0	0
Holmes	1,438	0	0
Garbutt	1,410	0	0
Blackburn	1,384	15	0
Executors of T. Southern	1,383	0	0
Harper	1,366	5	0
Goates	1,366	0	0
Habbershaw & Son	1,352	18	0
Grassby	1,350	0	0
Beilby	1,335	13	0
DRURY (accepted)	1,324	7	6
Simpson	1,308	0	0

## KING'S LYNN.

For Building Boys' School and Addition to Infants' Classroom, St. Nicholas Parish, King's Lynn. Messrs. W. ADAMS & SON, Architects.

Chilvers	£740	0	0
Brown	730	0	0
Bardell Bros.	710	0	0
Leach	679	0	0
Foreman & Jarvis	651	0	0
DAWES (accepted)	599	0	0

## LLANDYSSIL.

For the Erection of Unitarian Chapel, Llandysil. Mr. JOHN WILLS, Architect, Victoria Chambers, Derby.

DAVIES, Llandysil (accepted) £597 0 0

## LONDON.

For Rebuilding Workman's Cottage, No. 18 Providence Place, Lisson Street, N.W., and Repairs to adjoining Cottages, for Mr. W. King. Mr. S. PARKER, Architect, 427 Edgware Road, W.

PETCHY (accepted) £290 0 0

For Painting, Distempering, and other Works at the Poplar and Stepney Sick Asylum, Devons Road, Bromley-by-Bow, for the Managers. Messrs. A. & C. HARSTON, Architects, 15 Leadenhall Street, E.C.

GIBBIN, Bayswater (accepted) £336 0 0

For Painting and other Work at the Chelsea Infirmary, Cale Street, Chelsea, for the Guardians of St. Luke, Chelsea. Messrs. A. & C. HARSTON, Architects, 15 Leadenhall Street, E.C.

DERBY, Limehouse (accepted) £157 0 0

For Alterations at the Horse and Groom, Westminster Bridge Road, for Mr. Sewell. Mr. H. I. NEWTON, Architect, 27 Great George Street, S.W.

Axford	£879	0	0
Godden	855	0	0
Langlead & Way	798	0	0
BEAL (accepted)	798	0	0

## Peutcher's Work.

Warne	95	0	0
Davidson	69	15	0
HEATH (accepted)	67	0	0

For the Erection of Residential Chambers at the corner of Old Brompton Road, South Kensington. Mr. W. H. COLLBRAN, Architect, 94 Gloucester Road.

Conder	£14,500	0	0
Huey	14,221	0	0
Boyce	14,200	0	0
Martin, Wells & Co.	14,200	0	0
Perry & Co.	13,500	0	0
Nightingale	12,009	0	0
Stephens & Bastow, London and Bristol	12,000	0	0
Smith	11,975	0	0
Toten & Sons	11,975	0	0
Stimpson & Co.	11,470	0	0

For the Erection of an Iron Roof, Spitalfields Market. Mr. HENRY LOVEGROVE, Surveyor.

Crogon & Co.	£4,300	0	0
Clark, Bunnett & Co.	3,750	0	0
The Teeside Iron and Engine Works Com-pany	3,068	13	2
Potter & Sons	2,980	0	0
Newton, Chambers & Co.	2,951	0	0
The Buttery Company	2,833	0	0
The Horfely Company	2,800	0	0
Young & Co.	2,756	0	0
Witford & Co.	2,751	0	0
Jones	2,734	0	0
Shaw & Co.	2,575	0	0
Jukes, Coulson, Stokes & Co.	2,520	0	0
Goddard & Massey	2,488	0	0
Williams & Co.	2,425	0	0

For Erection of Board School, Yerbury Road. Mr. E. R. ROBSON, Architect.

Harris & Wardrop	£15,582	0	0
Williams & Son	14,802	0	0
Scrivener & Co.	14,697	0	0
L. H. & R. Roberts	14,656	0	0
Chappell	14,585	0	0
Cox	14,490	0	0
Boyce	14,285	0	0
Grover	14,184	0	0
Brass	13,973	0	0
Pritchard	13,886	0	0
Wall Bros.	13,777	0	0

For Works of Painting, &c., to Schools, for the London School Board.

Dalglish Street.	£270	0	0
Atherton & Latta	259	0	0
F. & F. J. Wood	258	0	0
North	254	0	0
Stevens	228	10	0
Robey	225	0	0
Sargeant	204	0	0

## LONDON—continued.

## Marner Street.

F. & F. J. Wood	£236	0	0
Tait & Co.	215	0	0
Atherton & Latta	205	0	0
Sergeant	188	0	0
Smith & Sons	185	0	0
Robey	163	0	0

## Maidstone Street.

Snegin Bros. & Co.	261	0	0
Pritchard	215	0	0
Sergeant	210	0	0
McCormick & Son	200	0	0
Cox	193	0	0
Robey	178	0	0

## St. Clement's Road.

Titmas	395	0	0
North	314	0	0
Oldrey	313	0	0
Wall	303	0	0
Petchy	300	0	0
Smith & Sons	297	0	0
Hobson	289	0	0

## Walnut-tree Walk.

Higgs & Hill	284	0	0
Julian & Co.	270	0	0
Hobson	264	0	0
Mallett	250	0	0
Nightingale	247	0	0
Rice	245	0	0
Horton	195	0	0

## Nightingale Street.

Horton	125	0	0
Stevens	119	0	0
Hobson	104	0	0
Titmas	103	0	0
Oldery	87	0	0
Petchy	86	0	0
Hornett	63	9	0

## Lower Clapham Street.

Robey	184	0	0
Derby	150	0	0
Tait & Co.	140	0	0
Coombe & Son	97	0	0

## Marlborough Road.

Wall	319	0	0
Pritchard	313	0	0
Smith & Sons	291	0	0
Stimpson & Co.	282	0	0
Horton	240	0	0

Sergeant (did not tender).

## Webb Street.

Good	329	0	0
Rice	302	0	0
Julian & Co.	300	0	0
Hobson	298	0	0
Mallett	293	0	0
Gerrard	293	0	0

Titmas (no tender).

## St. John's Lane.

Grover	189	0	0
Williams & Sons	164	0	0
Hobson	163	12	6
Green	140	0	0
McCormick & Son	122	0	0
Kirby & Chase	115	0	0

## MILFORD.

For Alterations to Primitive Methodist Chapel, Milford, Derbyshire. Mr. JOHN WILLS, Architect.

Spencer, Derby	£337	0	0
Kent, Duffield	328	0	0
Wheeldon Bros., Belper	280	0	0
Hingley, Duffield	275	0	0
DYER, Belper (accepted)	275	0	0

## MOLD.

For Alterations to the Market Hall, Mold. Mr. D. WALKER, Architect, Liverpool.

ROBERTS (accepted) £853 0 0

## NEWPORT.

For Partial Rebuilding and Restoration of Newport Parish Church, Salop. Mr. JOHN NORTON, Architect.

Whittingham	£3,602	0	0
Coleman Bros.	3,494	0	0
MUIRHEAD (accepted)	3,410	0	0

## OLD BASFORD.

For Building Thirty-two Dwelling-houses, Dobb Park, Old Basford. Mr. LAWRENCE BRIGHT, Architect, Nottingham.

Moore Bros.	£5,100	0	0
Wool Bros.	4,930	0	0
Stainforth	4,300	0	0
Evans & Woodcock	4,237	0	0
Hind, Ratcliffe	4,172	0	0
Warnaby	4,150	0	0
Sills, Bulwell	4,100	0	0
Pykett	3,990	0	0
Slight	3,977	0	0
Bains & Turton	3,920	0	0
Collison	3,800	0	0
Clarke, Basford	3,789	0	0
Houldsworth	3,755	0	0
Stainforth Bros.	3,740	0	0
Richards, Tibshelf	3,680	0	0
Dudson & Parrish	3,523	0	0
Taylor	3,407	0	0
HOOTON & SMART (accepted)	3,198	0	0

## RIDGWAY.

For Erection of Tower to St. John's Church, Ridgway. Messrs. S. ROLLINSON & SON, Architects, Chesterfield.

Tinkler, Clay Cross	£639	0	0
Chadwick & Co., Rotherham	600	0	0
Fidler, Eckington	585	0	0
Fidler Bros., Intake	575	0	0
Wright, Chesterfield	494	0	0
MARGERISON, Barlow (accepted)	490	0	0



RISCA.

For Building Public Hall, Offices, &c., Risca, Mon. Mr. G. ROSSER, Architect, Pontymister, near Newport. Quantities by the Architect.

Moulton & Browncombe	£1,900	0	0
Jones & Son	1,850	0	0
Blackburn	1,765	0	0
Morris	1,750	0	0
PROSSER (accepted)	1,600	0	0

All the above are resident at Newport, Mon.

ROCHESTER.

For Building the Rochester and County Club, Mr. GEORGE FRIEND, Architect, Maidstone.

Patman & Fotheringham, London	£3,718	0	0
Wiles, Dover	3,508	0	0
Denne, Walmer	3,497	0	0
Foster & Dicksee, Rugby	3,325	0	0
Kirk & Randall, Woolwich	3,276	0	0
Callund & Son, Rochester	3,240	0	0
Blake, Sevenoaks	3,200	0	0
Naylor & Son, Rochester	2,993	0	0

SANDOWN.

For Alterations at the Town Hall for the Sandown Local Board. Mr. JAMES NEWMAN, C.E., Town Surveyor.

Attrill	£98	10	0
Reed	89	10	0

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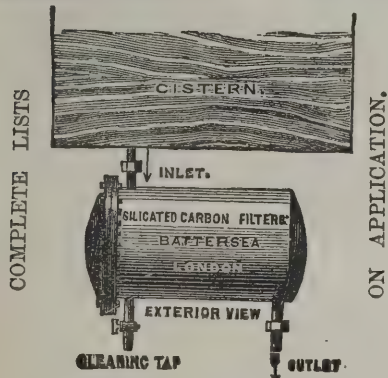
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SANDOWN—continued.

For Lime Store and other Works for the Sandown Gas and Coke Company, Limited. Mr. JAMES NEWMAN, C.E., Sandown.

Hayden	£110	0	0
Jolliffe	90	0	0
Colenutt	75	0	0
YOUNG (accepted)	65	0	0

SHANKLIN.

For the Erection of a Manager's Cottage for the Shanklin Gas Company, Limited. Mr. JAMES NEWMAN, Architect, Sandown.

Newman	£445	0	0
Young	444	0	0
Hayles	410	0	0
Newnham	398	0	0
White	389	10	0
COOPER (accepted)	350	0	0
Toomer	337	0	0

SPALDING.

For Alterations to the Corn Exchange and Butter Market, Spalding.

Harrison & Watson	£293	0	0
Dawson	247	10	0
Levesly	222	0	0
Wallis & Son	220	0	0
MOORE, jun. (accepted)	175	0	0

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For the Erection of Farm Buildings for Admiral Sir Geoffrey T. P. Hornby, K.C.B. Mr. JAMES NEWMAN, Architect, Sandown.

Irish	£387	12	0
Stallard	375	0	0
BLACKMORE (accepted)	352	10	0

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For Building one entire Block of the proposed new Additional Houses at "The Royal National Hospital for Consumption," Ventnor. Mr. T. HELLIER, Architect. Quantities supplied by Mr. H. P. Foster.

Jolliffe, Bonchurch	£5,815	0	0
Hayden, Sandown	5,200	0	0
Meador, Ryde	5,200	0	0
Bail, Cowes	4,830	14	0
Burton, Ryde	4,640	0	0
Ingram & Son, Ventnor	4,500	0	0

WEST HAM.

For Covered Way to South Porch of West Ham Parish Church, Mr. J. T. NEWMAN, Architect, 2 Fen Court, E.C.

Reed	£298	0	0
Cheffinis	292	0	0
Morter	290	0	0
Norton & Son	283	0	0
Gregar	239	0	0

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They also invite the particular attention of the trade to their IMPERIAL PATENT BLIND LINES, which are very superior to anything yet offered.

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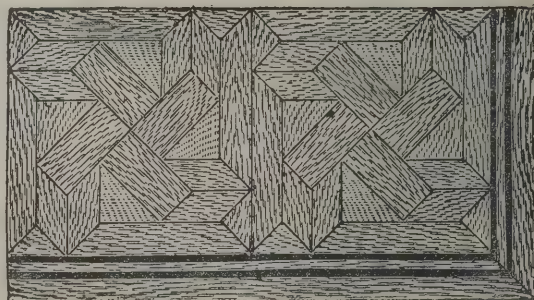


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# The Architect.

## SANITATION SOCIETIES: THE POSITION OF ARCHITECTS.



ERHAPS it is not altogether sanitary science, or even the practice of sanitation, in the full sense of either of these terms, but something that is to be called sanitary business is certainly making considerable progress with the public. A few weeks ago, for instance, the presence of royalty was secured for the opening of the new "Parkes Museum of Hygiene."

One day last week the formal annual meeting of a new organisation, with the imposing title of the "Sanitary Institute of Great Britain," was held in no less dignified a place than the Royal Institution, when many medals and certificates of merit were handed to the representatives of new and improved appliances of health produced all over the country. "Sanitary Inspection Associations" are also being established in various large towns, with what seems to be regarded as a sufficient prospect of success. Annual dinners, moreover, are being eaten in remembrance of these various institutions, which is always a practical sign of their supporters "meaning business." So, there can be no doubt of it, we are spectators of a vigorous public movement in the direction of sanitation. It is no disparagement of such a movement to observe that it is limited for the present to the improvement of the healthiness of dwelling-houses, and, indeed, confined almost entirely to the improvement of drainage apparatus. Such is the case for two simple reasons: not only is the wholesomeness of our dwellings a consideration of the very foremost importance, but there is so much to be done, as matter of fact, in this first field, that it may, indeed, be some time before we see any other department of the enterprise attacked with energy.

We have not failed to discuss occasionally in this journal the important issues that have been raised in connection with domestic sanitation; and we cannot help viewing with continuous interest the measures which are being taken to give practical effect to the advance of public intelligence and the formation of public opinion thereon. We may therefore be permitted now to inquire whether the enterprise as a whole has reached the point at which the practical question may be asked—*What position do architects mean to assume?* Putting the case very plainly, there are to be seen in the lists of the promoters and managers of the new sanitary institutions the names of so very few architects, and those of so unpretending a character, that no practical man can well help wondering what such a circumstance indicates. Who is entitled to take the lead in any matter of house building before the architect? Who else is bound, as he is bound, to see personally to all such affairs? Is he above his business? Is he ignorant of his business? Is there anything in the mere sanitation of the houses he builds, the responsibility for which, in the face of a practical people, he can venture to propose to delegate permanently to someone else? No one who has any appreciation of the function of what is called a profession, or even of a trade, in this purely commercial nation, can fail to see that these are serious questions, and questions that must sooner or later be seriously answered.

The chief idea which lies at the root, we may say, of such organisations as we have alluded to, is no doubt the manifest expediency of promoting the examination and amendment of the haphazard drainage appliances of the common run of houses. The leading doctrine is that they are both badly contrived and badly executed, and that the health of the people is almost as much prejudiced as benefited by them—at any rate, very greatly and quite needlessly prejudiced, and this especially, of course, in large towns. It is on this incidental ground, perhaps, that the movement has been initiated, as it has been, without the leadership of architects. Doubtless a sanitary surveyor is prepared to deal with new houses as well as old, and important ones as well as unimportant; and doubtless also there are not wanting instances in which houses of the best have been carelessly contrived in sanitary respects by architects of the best.

We may admit—it would be both disingenuous and useless to attempt to deny it—that the proper arrangements as regards the drainage of a house are not even yet understood as they ought to be by architects of certain classes. We may even go further, and acknowledge that all architects require at this moment to devote special attention to the study of the experimental science of drainage. But all this is because this science of drainage is in a certain sense a new science; and we do not in any way acknowledge the existence of professional negligence because a new science, albeit a small and simple one, takes time to develop. Our argument is only this—that the sanitary movement cannot permanently dispense with practical architectural leadership; and we are asking the question when this leadership is to be introduced. Three or four gentlemen educated for physicians, with a handful of miscellaneous "civil engineers," may suffice to bring the matter before the public in a sort of amateur way; but when the public are fully alive to the necessity for action, it is not to specialists of this empirical and self-constituted order that they will look, but to the experienced profession of practical men of business, on whose shoulders alone the responsibility for house-contrivance rests by the express appointment of society. Such design, in a word, is the work that is committed to the architectural profession to do; it is the *raison d'être* of the architect's existence; he is *architectus*, the chief of the workmen, or nothing at all; and the English public will never consent to relieve him from any part of his work; "he must do it all, or it will not be done," is the language of simple common sense.

That the men who are the practical leaders of the architectural profession, so soon as they are brought to study the new science seriously, will be found fully and readily equal to all the necessities of the case, it would be idle to deny. When the time comes for their decided action, it will no doubt be said that they are taking up the work of the present pioneers and reaping where they have not sowed; but that cannot be helped. We are inclined simply to say that if they delay their action much longer, mischief may come of it. The Institute of Architects, in short, ought to move in the matter, and the sooner this is done the better for all concerned. We say this because, as it seems to us, the only other alternative is the establishment of a special association of architects—to all intents and purposes an association of the members of the Institute to do the work of the Institute—for attending to the sanitary part of architectural business, and for advancing in a way at once theoretical and practical the scientific study of the subject. One of the principal purposes which the new sanitary societies profess to have in view is the examination of sanitary surveyors and their certification for specialist practice. This, we venture to think, is a pragmatic project that has no prospect of success. If there is to be such a thing as a diploma set on foot for the practice of wholesome house-building, in whatever way, it is the great house-building guild of the country that must undertake the administration of it, and not a little committee of amateurs. We stumbled at random the other day upon an odd phrase in an American journal. The advice that he had received, said the unabashed writer, "to go in for hygiene as a promising lead," was sound. . . . My new American Universal Ventilator is a success—can be applied to anything, from a hat to a hospital;" and so the next proposal of this enterprising philanthropist is "to start a daily hygienic journal . . . to be printed on medicated paper," and so on. If some of our English sanitarians are only "going in for hygiene as a promising lead," no one need object; it is the way of a commercial community; but so soon as this has come to anything of real public utility, the practical work, we repeat, must be taken up by the practical men who are duly qualified and appointed to serve the public *secundum artem*.

Judging by the observations which are now and then made in public—a little too zealously perhaps—with reference to the subject in hand, it would appear that some of our chief amateur sanitarians are inclined to regard the English architect as a futile official, who not only can be easily dispensed with by clever people, but can scarcely be expected, in any business of his own, to be the possessor of such skill as belongs to common sense. We have not heard so much of this doctrine in its relation to general affairs as we were accustomed to a few years back; it would seem as if some class of our practitioners, who were wont to provoke especially the anger of the scorners, may have disappeared. Perhaps the succession of playful Queen ANNE art to the abdicated ascendancy, of austere Gothic may have brought about this result in partial



atonement for its own little sins; but so it is, and the architect is certainly not at present the butt of animadversion that he used to be. But we take it upon us to say that, so far as it goes, the new distrust of the architect will prove quite as foolish as past distrust of him has been. There is something in the lifelong habituation of the mind to the special contrivance of buildings, which those who do not happen to possess it by the regular means can scarcely ever acquire or understand; and we have no hesitation in asserting that already, in the matter of improved drainage—crotchets apart—there is as good average work being done by the ordinary run of architects, privately and quite without pretence, as any fair average of the best specialists in the so-called profession of sanitary engineering can possibly show. The real working architect of everyday English business is not the distinguished artist or the prominent dignitary of the Institute; in most cases he is not a member of the Institute at all, and, if an artist—possibly a clever artist—a modest one. It is men of this stamp who are the backbone of the profession as regards the esteem of the public; indeed, in the aggregate, they do almost all the work of the country and make almost all the money; and it is these who, as they must before long take sole charge of domestic sanitation, will be found to be already taking partial charge of it with sufficient success. But still we want in these days, in every important professional movement, a formal recognition of the work at the hands of authority, and this we think it is obviously the function of a Royal Institute of Architects to supply. When the holidays are over, we hope to find some of the more enterprising and practical members taking up this matter with earnestness—not two or three half-informed casual inquirers, but a sufficient number of really expert scientific men to represent the whole force of the profession, and probably to be constituted one of the standing committees of the Institute.

### M. JULES DIDIER.

[BY A CORRESPONDENT.]

IN 1858, the Council of the Ecole des Beaux-Arts issued a decree in virtue of which the professorship of landscape painting was *supprimé*; the class of students of that special branch of art was consequently dispersed. JULES DIDIER was one of the last pupils who carried off the Prix de Rome, by an historical landscape. His father, the founder of the *Librairie Académique*, educated his son in the strict principles of classicism. A profound reverence for the antique, an abhorrence of impressivism, and, indeed, of innovation generally, were carefully inculcated in young DIDIER's home, and when his manifest vocation for art study compelled his father to decide on the master under whose direction he should acquire his first principles of art, COGNIET, then in the *apogée* of his fame, was the professor selected. COGNIET's *atelier* was crowded by the aspiring geniuses of the day. Among JULES DIDIER's class-comrades were the great portraitist BONNAT, whose finest work, perhaps, is his portrait of his old master, and JULES LEFEBVRE, whose *Psyché*, "l'étoile au front, les mains tenant le sort du monde," attracted so much attention at the Salon of this season. COGNIET's studio formed the majority of the men who have come to the front within the last twenty years. The old man was a stern disciplinarian. He detested smoking in all its phases. From the *bien culottée* pipe to the delicate cigarilla all means of imbibing the noxious weed were equally hateful to him. "Impossible," he maintained, was it "to preserve *mens sana in corpore sano* while inhaling an atmosphere charged with vile smoke, and as to judging the effects of gradated light, for instance, *Sacrebleu, jamais!*" Having delivered these sentiments, COGNIET would leave the studio, at which he appeared but twice in the week. A model being engaged for eight days only, the students had to make the best of their opportunities. If, however, on entering to give his lesson, the old man perceived a cloud of tobacco smoke, he simply shut the door and did not return for days, the pupils thus losing the benefit of his correction of their drawings of a model who had probably been changed since old COGNIET's last visit. *Tant-pis* for them! JULES DIDIER studied lithography as well as landscape painting under COGNIET's direction. In the pre-photographic days, lithography was almost the only means of obtaining a popular reproduction of the works of the time. The revived art of etching was then in abeyance. JULES LAURENS and DIDIER

emulated MOUILLERON in their lithographs of TROVONS and DIAZ landscapes, and of FROMENTIN's scenes of camp life in Algiers. Specially remarked at the time were DIDIER's lithographs of ROSA BONHEUR's *Cheval de Trait*, and of her *Chevreuils*. In 1857 young DIDIER carried off the Prix de Rome by his *Diana Surrounded by Nymphs*, and consequently left COGNIET's *atelier* for Rome.

Life at the Villa Médicis was in those days pleasant. The fortunate prizemen had 200*l.* a year at their disposal for five years, which a quarter of a century back sufficed them, for Rome did not then rival Paris in the excessive dearness of the necessaries of life. Under the Republican Government it has been impossible for the *Ministre des Beaux-Arts* to obtain an increased stipend commensurate with the higher rate of living, and the sum hitherto allowed for five years' residence having been found insufficient, the prizemen are henceforth restricted to a four years' course of study in Italy. M. SCHULTZ was professor in residence when JULES DIDIER reached Rome. The situation of the Villa on the Pincio, commanding as it does an extensive view over Rome from one side and over the Campagna from the other, is particularly happy. An *atelier*, besides a furnished apartment, is allowed to each of the students, who meet in the refectory for their meals, and, moreover, enjoy the use of a magnificent *salle* wherein to receive their friends. Professor SCHULTZ presided over the advancing fortunes of no less than four successive generations of young artists, who speak of him with reverence, as having been accessible to all who sought advice from him, but as having carefully abstained from the slightest interference with them. At the expiration of three years at the Villa, JULES DIDIER started for Naples, Florence, and Venice, in accordance with the programme of the *Ecole des Beaux-Arts*. Architect pupils proceed to Greece and Turkey to study Greek and Byzantine architecture, and are allowed a considerable sum in addition to that given to painters and sculptors, in order to defray the expense of these travels.

The study of POUSSIN, whose works are scattered over Italy, made a profound impression on DIDIER. It is evident, not only by the choice of his subjects, but by the manner of his composition, that to this day POUSSIN is his ideal; but specially is the influence of the great master noticeable in DIDIER's early works. His last *envoi* from Italy, *Horace discovered by the Shepherds*, sent to Paris 1862, was purchased by Government for the Musée de Boulogne. The child-poet, covered by the leaves which doves have laid over him, has fallen asleep at the base of rocks surmounted by trees, through the branches of which light falls on the figures of the shepherds who discover the infant. The blue waters of the Mediterranean are seen in the far distance. DIDIER carried off a medal at the Salon of 1866 for two pictures; the subject of one is *Souvenir of the Lake of Trasimene*, and of the other *Labourage sur les Ruines d'Ostie*. In the latter, the primitive system by which land is tilled in the vicinity of the Italian capital is graphically rendered. Six teams of four oxen, guided by a *mercante di campagna*, are harnessed to ploughs which would amaze, if not enlighten, a Yorkshire farmer. Each consists of an iron shaft secured to a plate, on which a man stands in order that his weight should force the instrument into the soil. The artistic merit of the picture consists in the masterly drawing of the oxen, and the sense of slow movement given to the heavy animals who follow in procession round the field. Both these works were purchased by Government for the Luxembourg, where they now are. M. CABANEL, then in the zenith of his artistic career, on seeing the *Lake of Trasimene*, regretted that a second and separate medal could not have been accorded to it, on account of the luminous quality of the atmosphere in which the landscape is painted. In M. DIDIER's studio, 59 Rue de Vaugirard, there is but a single canvas besides the one on his easel, for the simple reason that his works are scattered over France. He was put *hors concours* in 1869 by *Entre Rome et Civita Vecchia*, an effect of evening sun on the coast-road, along which some magnificent dun cows are slowly returning from grass. JULES DIDIER's Italian subjects recall his contemporary OSWALD ACHENBACH's, so popular in Germany on account of the golden light which pervades them. Amiens purchased his *Castel Fusano*, and sent him its *diplôme d'honneur*, and Rouen his *Abreuvoir dans les Abruzzi*, which carried off the gold medal of the year.

In 1878 the City of Paris commissioned DIDIER to execute three large water-colour drawings of the principal promenades of Paris. The *Place de la Concorde*, the *Champs-Élysées* and the



*Bois de Boulogne*, and the *Parc des Buttes Chaumont* are the subjects he selected. They were exhibited at the Universal Exhibition, and, to M. DIDIER's extreme gratification, elicited marked approbation from H.R.H. the Prince of WALES, whose attention they were fortunate enough to attract.

In direct opposition to the impressionist movement of the day, JULES DIDIER, trained in the traditions of the school of which *POUSSIN* is the ideal, does not rest satisfied with the *à peu près* of a landscape half concealed by a hazy mist, through which the eye but dimly discerns the idea the artist wishes to render. He honestly expresses on canvas the sensation he himself experiences in presence of the scene he paints. Air freely circulates on his canvas, his scenes are admirably chosen, light and shadow are carefully distributed. His style is reminiscent of *PAUL BRIL*, whom he recalls by the delicacy and brilliance of his touch, as also by the truth and simplicity of the details in his foregrounds. In 1881 he carried off the prize offered for the decoration of one of the schools belonging to the City of Paris. By permission of the authorities the various drawings for the frieze of the buildings were reproduced in *The Architect*, and are, therefore, fresh in the memory of our readers.

His studio is of the simplest, and typical of the artist to whom it belongs. JULES DIDIER is utterly unconscious of his own superior talent, and, in speaking of the various distinctions which have been lavished on his works, he seems, with quasi-amusing simplicity, to apologise for their having been bestowed. Gladly he turns conversation to any other topic, even falling back to the somewhat threadbare siege, during which he and his friends, the sculptors *FALQUIÈRES* and *CHAPU*, served in the 19th Legion of the Garde Nationale. JULES DIDIER then lived in the Rue de Fleurus; a shell burst within one mètre of the wall of the house without injuring it, although the next building was shattered by the concussion. The one picture in his studio which recalls his life in Italy is of *Ostia*, which, it will be remembered, was the harbour of ancient Rome. In the course of centuries the sea has receded some miles, but the sandy quality of a sea beach remains and now forms the river-bank of the Tiber. On this beach Roman cattle have come to rest after their day's work on a farm. The water of the river reflects the white light of a winter sun. In the distance are ruins.

On the easel is one of the decorative panels on which M. DIDIER is at work for the Comte de CHABRILLANT'S *Château de Beauregard*. The subject is a French hunting-scene. The whipper-in, riding a powerful brown horse, is attired in a blue costume faced with red, and wearing a *cor de chasse* slung across his chest, of dimensions which would startle the most self-possessed M. F. H. who ever guided the fortunes of the Quorn or the Cottesmore. The hounds are cleverly drawn. The country across which they have to ride is more picturesque than pleasant. The subjects of two other panels for the same room are taken from the legend of St. HUBERT, who, it will be remembered, was a mighty hunter in his day, but somewhat profane as regards his manner of speech, habits, and customs. On one occasion he was using language not precisely canonical to his whipper-in, when, lo! in front of him, beneath the over-arched branches of oak trees, he saw a stag—a royal stag of ten—and between his antlers a luminous cross (whence proceeds the light in DIDIER's picture). Straightway, spite the brilliance of his crimson suit, on his knees fell St. HUBERT in the muddy forest-path, for it was mid-winter, and the Ardennes is a rainy district. He there and then vowed he would repent, which he proceeded to do by that night entering a convent (we conclude that he previously entered into arrangements as regards selling his stud of hunters), and the last history records of him is of his installation as Bishop of LIÈGE.

An architectural drawing in water-colours of buildings lately erected by M. PAUL SEDILLE, architect, at the angle of the Rue du Havre and the Boulevard Haussmann, not only reproduces the elegance of M. SEDILLE's design, but the *va-et-vient* of Paris life. The broad street is thronged, for it is mid-day, and the season is at its height. A bank messenger, in all the stately importance conveyed by his cocked hat and blue livery; *pieu-pieu* in *petite tenue*, their *képis* slouched over their faces, their blue jackets and red trousers somewhat loose for their wiry figures; *sergents de ville*, in their tight blue uniforms, stiffly surveying the hurrying crowd; a heavily-freighted omnibus, and a well turned out Victoria and high-stepping bay, conveying Prince FLEUR DU CHIC to the Jockey

Club, are admirably and characteristically detailed. Shade of *POUSSIN*! *Requiescat in pace*!

A delightful little picture a few inches square, *Shooting Wild Ducks among Reeds on the Banks of the Garonne*, on whose clear water the broad leaves of the *nenuphar* float, is a reminiscence of a pleasant day's sport. "Car," remarked the artist; "j'aime beaucoup la chasse."

## STUDIES OF SOME LONDON CHURCHES.

(Continued from page 17.)

THE Church of St. Luke, Canterbury Road, Kilburn, when the writer saw it, was on the outskirts of metropolitan civilisation, having a road on two sides of it, and nothing but fields beyond. It therefore rightly partook more of the character of a country, than a town church, notwithstanding the material of which it was built (brick), and had no lofty or impressive exterior. But it is vain to write of any church as rural bordering on that great gulf, London, which swallows up everything around it. The gabled bell-turret, instead of being planted at the west end or over the chancel arch, is on the south gable, which has not a happy effect. The ridge line of the nave and chancel roofs is continuous, there being a more ornamental cresting to the chancel, and a red pottery cross over the commencement of the latter. The porch is scarcely in good proportion. It has a roof of sharp pitch, but with a door of scarcely sufficient height for dignity's sake, though no doubt amply sufficient for all save sons of ANAK. The interior of the building is church-like, but a little extra height would have been an improvement had the funds permitted the additional outlay. The nave piers are octagonal, the sides of the cardinal points being longer than the four splayed sides; this plan changes into a square in the bell of the capital. The object of the arrangement is obvious. It saves, as far as possible, any cutting of the brick arches, which are thus able to run down to the top of the abaci. The former have a 2¼-inch square-edged reveal from the face of the wall, with a plain red brick label, and the inner order is also square-edged. Throughout the church every effort has been made to use uncut brick whenever practicable, as in the aisle windows, where there are no splayed inner reveals, but a sufficient width on each side of the sight line. So for all the practical purposes of spreading the light, the desired object has been attained. This square-edged reveal is of good depth, and seems a better treatment than a series of shallow brick orders one after the other, such as are sometimes employed. Even the corbels to the principal timbers of the nave are not of stone, but formed of over-sailing courses of brick, while in the chancel stone corbels are adopted. The nave roof has tie-beams and king-posts, with a polygonal panelled ceiling. The former appear somewhat plain and rude, neither moulded nor chamfered, and too nearly courting the remark of being hardly good enough for a church. There is a soffit above the cornice ranging with the front line of the bracket under the tie-beams. This consists of one long narrow panel between each truss, and could at any future time well be filled with tracery. The object of the architect in this arrangement of the advanced soffit to the cornice must have been to give greater apparent height to the nave, as, if the ashlar pieces above the tie-beam had been set in the ordinary way, the cornice must necessarily have been lower down. The east window consists of a lancet-headed triplet, without any cusps, enclosed in a large square-edged arch; the latter is carried on a brick pilaster, which, having a deep reveal, gives some considerable dignity to this end of the church, at the same time economising material. On the north side of the chancel is the prolongation of the nave lean-to aisle; on the south a gabled organ chamber, with vestry. The opening on the north side is an arch within an arch, presumably that it may better accord with the south side. The only distinction between the nave and the chancel is the raising of the floor of the latter, and the occurrence of a stone shaft supporting the hammer-beam principle, the former extending quite down to the floor. The central passage of the nave is happily of good width, a great point in a church where economy is evident along the whole line, and where, in other cases, false economy is often practised. It is laid with Portland cement, covered with cocoanut matting, and with a narrow edge of tiles. Taken altogether, this structure is a favourable specimen of an inexpensive church where dignity has been obtained.



The *Church of St. James*, Westmoreland Street, does not present any particular architectural character, though there has been a scheme for putting a good façade to it, published in one of the architectural journals some time since. Though the building is Italian in style, it has been treated in a kind of Byzantine manner, and decorated in colour. Unfortunately it has been too often the practice for architects in the case of churches to relegate Italian decorative work to the background and to attempt a sort of compromise. Now the writer has very strong notions as to the superiority of Mediæval architecture over Classic, but at the same time trusts he could restrain himself and not let his Gothic peculiarities run wild were he called upon to embellish or decorate in colour some Italian or Renaissance structure. "A place for everything and everything in its place," as well says the homely old proverb. At St. James's Church, semicircular arches have been added under the bearers of the gallery fronts, carried on responds attached to the main piers. The spandrels are filled in with semicircular arches. Embossed glass is used to the windows, the advantage of which is questionable, and one wonders what is the object just as much as in the case of pavements, for which during the last few years embossed encaustic tiles have been sometimes employed. In wall decoration such tiles offer a favourable opportunity for a variety of treatment, but in the tiles used for pavements a perfectly flat character seems best. The writer is not aware in Mediæval work of any precedent for embossing in glass. This is not necessarily a reason for "tabooing" it, but there was doubtless some good reason why our forefathers did not adopt it. For instance, dust and dirt are liable to collect in the interstices and so destroy the transparent character so all essential to glass, and sometimes so sadly ignored by the too lavish use of opaque enamels. Moreover, an irregular surface does not seem suitable to the material and gives it a heavy effect, while flatness in the glass spaces, where such flatness is natural, gives all the more emphasis to the general architectural lines. With this little explanation of the text taken from St. James's Church, the writer finds he has said all that is necessary about a church which is more celebrated for its pastor than for the material fold in which his sheep are gathered together.

The *Church of St. John*, Ashburnham Road, Chelsea, close by the site of Cremorne Gardens, is a specimen of a red brick building, and externally is of no special interest. The interior is more satisfactory, though the detail is not very refined. Perhaps the best feature of all is the mode in which the lower stage of the tower is used as a baptistery, and vaulted in red brick, banded at intervals with white brick. The tower being at the north side of the church, and standing independently, though semi-attached to it, is in an appropriate situation for the convenient use of its ground floor; the infants are thus well protected from cold and draught. On the west side of the tower is what, externally, appears to be an aisle, but is in reality the lobby and approach to the west gallery. The porch in the angle formed by the tower and the nave has a plain boarded ceiling, and in character appears scarcely good enough when near so elaborate a baptistery. The nave roof is of that form which of late years has become fashionable, though its character is rather un-English, resembling North Italian Gothic. The wood ceiling is trefoil-headed, but differs from the Italian form, as the upper foil is pointed instead of semicircular. Tie-beams and king-posts occur to the trusses, the former ranging with the point where the two foils meet. There is an advantage in this form of roof when the walls of a building for some reason are very high, and the pitch of the roof has to be rather flat; for by this kind of construction the ceiling can really be brought down some way below the plate. But in ordinary instances it is questionable whether much advantage is gained by adopting Continental peculiarities, when we have in England such an abundant store of Mediæval roofs, almost endlessly diverse in design. There is no chancel arch, and the roof of nave and chancel runs continuously from east to west, the length of the chancel being externally marked by a ridge cresting, with ornamental finial at its western limit. The windows of this church in general have plate tracery, a detail which, happily, is not so popular as it was a few years since. In our vernacular Mediæval architecture, about the period when this feature prevailed in France, there are scarcely any genuine examples of plate tracery, though the term is sometimes applied. Mistaken notions of manly vigour and force, simplicity, &c., led many men to prefer this crude cut-out-of-cardboard treatment to the far more refined though

equally simple Early English style. Though the writer has seen and studied the finest examples of Early French architecture, and knows how to attach proper value to many of its priceless beauties, yet he submits that in England we improved on the plate tracery when the Lancet style developed, and the succeeding magnificent style commenced. The arrangement of the two-bayed eastern aisle to the quasi-transept is rather picturesque. But it seems a mistake, while contriving the clerestory wall over the arches opening into the "transept," to have arcades closely resembling, not to say imitating, the clerestory windows. It would surely have been better if this plain, unpanelled piece of wall had been left to tell its own story and serve as a foil to its ornamental surroundings, as has been well done at another church in the west of London (St. Mary Magdalene's, Paddington), the design of one of our most eminent architects. There is a west gallery at the end of the nave, but it has not been treated as an integral part of the building, and has the too-frequent semblance of an after-thought, whereas it was constructed simultaneously with the rest of the church. It is invidious to make comparisons, but one need not wander very far to find some good examples, in this city, of west galleries which do not by any means detract from the monumental appearance of the buildings in which they have been set. Speaking from the point of view of a Churchman, and putting aside for the nonce architectural ideas, a gallery in a church is a mistake, and should always be protested against. In fact, instances in the present day are few and far between of galleries being built. On the contrary, one more commonly hears of their being pulled down. But occasions will arise when architects are called upon to make the best they can of features they rather deprecate. "Where there is a will there is a way," and the writer is convinced that, by a little study, a western gallery, with a circular or octagonal staircase made a feature of externally, and designed so as to be as easy of ascent and descent as possible, might be made picturesque rather than otherwise. There are two desks facing west, at the nave end of the chancel seats, the one on the south side being rather higher than that on the north, and with a brass desk, as it serves for a pulpit. This is unusual and seems a distant re-echo of the ancient basilican arrangement of ambones. It is a rather remarkable feature to find in a church where Evangelical teaching prevails. Within the last few years the idea of a basilican plan, which was taken up by the High Church party, has not gained much ground in that quarter, but has reappeared in buildings where the ritual is of a far less advanced type, as at St. Augustine's, Stepney. There are evident signs that the pulpit is not considered by the clergy so essential a feature as it used to be. It has gradually diminished in height, and in "Ritualistic" churches would appear to be thought of small account, as for years, flimsy, modern, makeshift structures, of an apparently temporary nature, rear their heads unabashed. A feature of a very utilitarian nature exists in this church—a brass drop-ring handle, outside the bench ends, to hold umbrellas, with a little metal pan under. In this rainy climate it is not unfit that in a large church some provision should be made of this nature, as it renders the building less uncomfortable for worshippers, as everyone who has come into church with a dripping umbrella must acknowledge.

(To be continued.)

### THE ENGINEERING EXHIBITION.—III.

AT the stand of Messrs. ENGERT & ROLFE, Barchester Street, Poplar New Town, E., the varieties of asphalt and bitumenous felts manufactured by this firm for all purposes of roofing, whether for houses or outbuildings, lining roofs and covering temporary sheds, lining damp walls, iron houses, and also as effective damp courses in foundation walls, for all which purposes it proves a handy and inexpensive material, were exhibited.

The tastefully-arranged stand of Messrs. MAPPIN & WEBB, Oxford Street, W., and Mansion House Buildings, E.C., did not fail to attract attention, forming as it did a striking contrast with neighbouring exhibits bearing on the construction of houses. When the house is finished it has to be furnished, and it will not be the fault of the firm if a client cannot satisfy himself with the articles produced by Messrs. MAPPIN, whether in the way of artistically-executed plate, candelabra, clocks, and matters of more ordinary detail in regard of household economies.



Messrs. JEAKES & Co., of Great Russell Street, Bloomsbury, showed their patent self-reversing steam washing machine, an invaluable invention for hospitals, workhouses, asylums, &c., and the patent "Invicta" ironing machine, which is no less valuable for efficiency in execution and for saving of time and labour.

Messrs. GEORGE RICHARDS & Co., Atlantic Works, 12 City Road, Manchester, exhibited their sawing and planing machines; among them a cross-cutting and ripping saw combined in one machine; a combined power and hand-feeding planing machine, with power to feed 18 inches wide and 4 inches thick, and supplied with various patent improvements. A comparatively new article offered to the public, and which appears to have found favour, is the patent hand-feeding planing machine. It is used for planing the surfaces and edges of timber of any size, without alteration of the machine. The cutter head revolves below the tables, and the wood is held down and fed by the hands. The tables, both before and after the cutter, are adjustable vertically, to regulate the depth of cutting, while, by means of automatic stops, the tables cannot be brought in contact with the cutter-block as their heights are altered. The machines are complete with cutters, adjustable bevel gauge, counter-shaft, and wrenches. Also shown were the improved steam glue-oven, band-sawing machine, pulley-balancing machine, &c.

Messrs. LEWIS OLRICK & Co., Salford Ironworks, and 27 Leadenhall Street, E.C., showed their well-known earth-boring tools, "Root's" pump, "Field's" boiler, "Blake's" latest improved patent stone-breaker, &c. The "Root" pump, which was to be seen working, differs from the ordinary rotary-pump, as well as from the centrifugal. It consists of two vanes, revolving in a casing in opposite directions. These vanes or abutments are formed in such a manner that a kind of rolling contact is kept up between them, rendering them practically watertight. As each vane revolves on its centre, one-half forms a vacuum between it and the outside casing, into which the water flows as the motion is continued; the opposite end coming round drives the charge already taken in before it, at the same time creating a vacuum behind it, which in turn is filled with water and discharged at the next revolution. The continual charging and discharging goes on simultaneously with both vanes, hence a constant flow is the result. Water may be drawn by suction from a depth of 28 feet, at either high or low speeds. It is chiefly intended for discharging very large quantities at low lifts, up to 50 or 60 feet, for instance; and hence it is especially adapted to the requirements of breweries, irrigation and drainage works.

Messrs. CAYLEY & CAYLEY, Brockley Street, Golden Lane, agents for Messrs. J. A. FAY & Co., U.S.A., had on view the patent hand and power feed surface-planer, variety wood-worker, edge moulding and shaping machine, patent band-sawing machine, &c.

Messrs. RICHARD HORNSBY & SONS, Limited, Spittlegate Ironworks, Grantham, showed a 20 horse-power compound steam-engine, fitted with multitubular boiler to carry a working pressure of 140 lbs. per square inch; a 25 horse-power high-pressure stationary horizontal steam-engine, for working a pressure of 80 lbs. per square inch; and a 3 horse-power vertical engine and boiler combined, and arranged on a vertical column with a double-ended crank, so that the power can be taken off either side.

Messrs. THOMAS ROBINSON & SON, Limited, Rochdale, showed various descriptions of wood-cutting machinery, and among them the universal wood-worker should prove a most useful machine. It can be used for planing, jointing, and trying-up short lengths, also for morticing, boring, and sawing, tonguing, grooving, and rebating. For planing, jointing, and trying-up, the timber is fed by hand over a cutter-block, capable of planing any width up to 12 inches. The tables above the cutterblock are made adjustable, so that as they are raised or lowered they approach or recede from the cutters, so as to keep the opening through which the cutters project as narrow as possible, and avoid any accident through their coming in contact with the tables. It is fitted with a canting fence and pressure rollers for holding down the timber. One end of the cutterblock spindle is bored to receive a boring bit, and is used for morticing and boring. The other end is arranged to carry a small saw 15 inches diameter, and fitted with rising and falling table. The saw can be replaced by a small cutterblock 2 inches wide, and used for tonguing, grooving, rebating, beading, &c. Also shown were a self-

acting grinding machine for sharpening long planing-irons, a small power morticing machine, a combined hand and power feed planing machine, &c.

Messrs. ALEXANDER SHANKS & SON, Dens Iron Works, Arbroath, and 27 Leadenhall Street, E.C., showed a patent compound double-acting vertical steam-engine, which is intended to effect a great saving in fuel. The form of the engine is simple. The working parts are few in number, and easily got at for lubrication, and all parts liable to wear are constructed so as to be adjusted without difficulty.

Messrs. W. H. BAXTER & Co., Albion Street, Leeds, exhibited their stone-breaking and ore-crushing machines, the patent knapping-motion stone-breaker, with improved screen, and others. The firm state that during the past year their sales have by far exceeded their expectations, and to meet the demand they have had to increase their means of production. Every machine supplied is guaranteed to break a stated quantity of stone, pyrites, granite, ganister, slag, boulders; also copper, tin, lead, and other ores. In some materials the machines are said to be breaking nearly double the quantity specified, and by the patent knapping-motion the quantity broken can at any time be increased without increasing the size broken to, no other machine having this advantage.

Messrs. T. WILSON & Co., Stowmarket (Messrs. G. F. SUTTON & Co., 100 High Holborn, agents) showed their protected alkaline composition for removing paint and varnish from wood, iron, and metal work, &c. The composition is effective and speedy in working; a few minutes after application the paint can be wiped away, giving a clear surface with nothing injurious left behind. Where time and labour are required to be economised nothing could be more effective.

Mr. W. H. HARLING, 40 Hatton Garden, had a tasteful display of mathematical, drawing, and surveying instruments, of excellent finish and workmanship. An improved horizontal-compass is designed to obviate, as in the use of beam-compasses, too much weight being allowed to fall upon the pen. The horizontal-compass resembles the ordinary beam-compass, with the addition of a joint in the middle, to which is attached a support running upon a small wheel, taking the weight from the point and pen. By setting the two arms of the beam at various angles small circles can be drawn, and by stretching them out in a straight line circles of the largest radius can be described.

Messrs. THOMAS & WILLIAM SMITH, St. Lawrence Rope Works, Newcastle-on-Tyne, showed various descriptions of hemp and wire ropes, their patent steel ropes of special construction for suspension bridges, for raising heavy loads—breaking strains for which are guaranteed up to 400 tons—also copper rope for lightning conductors, &c.

Messrs. VERITY & Co., Bramley, Leeds, showed their patent flexible shaft couplings, particularly suitable for vessels, &c. Shafts thus coupled together are rendered flexible in such a manner that they will adapt themselves to any irregularities in the line of bearers; and, whilst retaining all the qualities of the rigid shaft, they will transmit the rotary movement from the engine to the propeller evenly and rigidly, under all circumstances, without loss of power.

The Bower-Barff Rustless Iron Company had on view articles in ironwork of various descriptions, rendered rustless by the Bower-Barff process, and besides pipes, gutters, sanitary castings, &c., showed ornamental ironwork similarly treated, medallions, figured reliefs, vases, statues, ornamental brackets, railings, &c.

Messrs. FELTEN & GUILLEAUME, represented by Messrs. W. F. DENNIS & Co., 101 Leadenhall Street, exhibited iron and steel wire of all kinds for fencing and telegraph purposes, electric lighting, &c. The Indestructible Paint Company, Limited, 27 Cannon Street, E.C., displayed their preservative paints and invisible preservative solution.

Messrs. CHARLES CHURCHILL & Co., importers of American machinery and tools, exhibited an extensive assortment. The firm are the sole agents for the genuine MORSE's patent American twist drill, the only American drill made with grinding-line. We may also mention the BROWN & SHARP's gauges, calipers, and straight-edges for the use of architects and draughtsmen.

LLEWELLIN's Patent Machine Company, Castle Green, Bristol, and Bath Street, Glasgow, showed their time-checking machines, brass-finishing lathes, CLYNE's patent sight-feed lubricators, rotary steam-engine, &c.

Mr. JAMES KEITH, High Street, Arbroath, among his



exhibits showed a No. 1 c sectional boiler heating 100 feet, the cost of the apparatus being 5/. No. 2 c will heat 300 feet. The KEITH'S sectional boilers are made in prices to suit the requirements of the purchaser, and a shaking grate, which saves riddling the ashes, is an improvement just introduced. No. 1, alluded to above, is being sold as fast as the firm can supply the orders.

MESSRS. LLEWELLYNS & JAMES, Bristol, are known as the sole makers of CLEMENTS' patent economic lubricator, and showed their steam boiler and engine mountings, pumps, water-works' fittings, plant for brewers, &c. The firm state that there is a steady and increasing demand for the lubricators, both for marine and land engines, and which are guaranteed to effect economy in grease, power, and wear.

MESSRS. ARCHIBALD SMITH & STEVENS, James Works, Queen's Road, Battersea, and Leicester Square, showed the complete self-sustaining double dinner-lift in action, which are said to possess, among other improvements, all the advantages and security arising from the principle of automatic suspension.

MESSRS. HOLDEN & BROOKE, St. Simon Street, Salford, showed a self-acting portable drilling-machine, designed to work inside a boiler shell, and to drill two holes diametrically opposite at the same time; also a one-half-horse vertical gas-engine. MESSRS. DEAKIN, PARKER & Co., Sandon Engine Works, Salford, had on view a half-horse-power Sandon gas-engine; MESSRS. GREENWOOD & BATLEY, Albion Works, Leeds, a patent hand-power rock drill for quarrymen and contractors' use, &c.; Mr. E. S. HINDLEY, Bourton, Dorset, a No. 2 circular saw bench, with band saw apparatus and arrangements for tenoning, boring, and spoke-ending; small vertical engines and boilers, &c.

MESSRS. ANDERSON & HUNTING, Bath Lane, Newcastle-on-Tyne, who received a silver medal (highest award) at the Tynemouth Exhibition, 1882, exhibited their patent automatic dovetail and variety moulding machine. The cutter for forming the dovetail is fixed in a vertical spindle, and is of simple construction. The machine can be converted in a few minutes into a single spindle irregular or circular moulding machine, for moulding, tonguing, grooving, rebating, bevelling, plain and stop chamfering, &c. The improved surface-planing and thicknessing machine was also on view.

MESSRS. W. & T. AVERY, Digbeth, Birmingham, had a 10-ton self-contained wagon weighbridge, with patent self-recording steel-yard. Weighing machines, scales, and balances of various descriptions completed the exhibit. The firm are at present executing an order of 8,000 balances for the new parcels post authorities. Machinery for wood-working, sawing, planing, and moulding, &c., were shown by MESSRS. F. W. REYNOLDS & Co., Edward Street, Blackfriars Road; various descriptions of pumps and pumping machinery by MESSRS. F. PEARN & Co., West Gorton, Manchester; "Reliance" air compressors, and "Eclipse" rock drills, stone-breakers, tramway material, &c., by MESSRS. HATHORN & Co., 22 Charing Cross; and a variety of gas engines by the British Gas Engine and Engineering Company, Limited, 11 Queen Victoria Street; by Mr. JAMES SINCLAIR, 104 Leadenhall Street, MARTIN'S patent rotary pumps, driven by hand and by pulley, "Fire Queen" and "Express" fire engines, &c. MESSRS. JOHN WHITE & SONS, Park Road Tannery, Bingley, have now a representative in London, and had at the exhibition samples of their leather machine bands, manufactured without use of chemicals.

#### PARIS NOTES.

A NOVEL undertaking, both complicated and difficult in execution, has been lately commenced at the Paris end of the Asnières railway bridge. The work in question consists in removing a portion of the immense embankment upon which the lines now rest, and replacing it by an iron arch, under which will pass the new high road now in course of construction along the right bank of the Seine. The difficulty of the operation consists in the fact that the railway traffic over the bridge, which is daily crossed by a greater number of trains than any other in the country, is not to be interrupted for a single day. The length of the new viaduct will be 50 feet, the work being executed in two sections, the first of which consists in piercing two parallel galleries to receive the side pillars of the bridge, and the second in removing the central mass of earth after these pillars have been built up. The work cannot be terminated before next spring, and is being

executed by the Western Railway Company on behalf of the Department of the Seine.

The decorative sculptures for the interior of the new Hôtel de Ville are being rapidly pushed on, and during the past week several important orders have been given out by the Prefect, acting upon the advice of the Fine Arts Committee of the Municipal Council. Thus M. Chapu, whose only work hitherto for the Hôtel de Ville has been the statue of Hérold, the composer, for one of the outside niches on the first floor of the principal façade, has received a commission for two marble statues, to be placed in the grand dining-hall; while M. Idrac, the victor in the late Etienne Marcel competition, and M. Crauk have each secured an order for a marble statue for the same room. The execution of the stone busts to be placed on the bottom landing of the grand staircase has been confided to M. Delhomme, and M. Longepied will carry out the allegorical bas-reliefs for the Cour des Bureaux. The total amount of their orders is 70,000 frs. Nothing has yet been decided upon in reference to the execution of the decorative paintings, frescoes, &c., M. Ballu, the architect, having as yet laid no proposition on the matter before the Council.

At the last meeting of the Commission des Monuments Historiques it was decided to spend 309,500 frs. upon the repairing and preservation of the following: the fortifications of Carcassonne (Aude), the churches of Saint-Georges de Boscherville (Seine-Inférieure) and of Manzon (Ardennes), the old cathedrals of Dol (Ille-et-Vilaine) and of Tréguier (Côtes-du-Nord), the Courthouse of Dijon (Côte-d'Or), and the church of Saint-Martin d'Aime (Savoie). The commission classed as historic monuments the church of Aregno (Corsica), the Zaouia of Abd-er-Rhaman and Talbi at Alger, the Moorish baths of the thirteenth century at Tlemcen, and the old fortifications, including the Mansourah Gate of same town.

A resolution has been passed calling upon the authorities of the church of Saint-Rémy at Rheims to take proper steps for the preservation of the celebrated tapestries contained in that edifice, now hung in a dark and inaccessible passage, where they drag the ground, and are being rapidly eaten into by the damp and dirt; and the commission further urge that arrangements should forthwith be made to provide for the free admission of the public at convenient hours to the old cathedral of St.-Denis, which has lately been restored at great expense to the nation, and turned into a veritable museum of antiquities.

On the recommendation of the Minister of Public Instruction and Fine Arts, the following nominations of members of the art-world have just been made in the Order of the Légion d'Honneur: Officers—MM. Galland, painter, professor at the National School of Fine Arts, and La Rounat, manager of the Odéon Theatre; Knights—MM. Dalou, sculptor, who carried off the Médaille d'Honneur in the sculpture section of this year's Salon; Roll, painter; Gruyer, conservator of paintings at the Louvre; Dutert, architect, inspector of instruction in design; Pisan, engraver; Morice, sculptor of the great *Statue of the Republic*, inaugurated on the 14th inst.; Alègre, conservator of the Bagnols Museum and Library; Dasson, manufacturer of art bronzes, and member of the jury at the 1882 Exhibition of Decorative Art.

After seventy-two days' work the competitors in the painting section of the Grand Prix de Rome quitted their *loges* on Tuesday last. The subject given was *Edipus Cursing his Son Polynices in the Presence of his Daughters Ismene and Antigone*, and the ten competing artists, whose works will be exhibited at the Ecole des Beaux-Arts, have been placed in order of merit as follows: 1. Pinta, pupil of M. Cabanel, 2nd Grand Prix of 1882—born in 1856; 2. Lambert, pupil of MM. Cabanel, Bin, and Lequien—born in 1854; 3. Tollett, pupil of M. Cabanel—born in 1857; 4. Castaigne, pupil of M. Gérôme—born in 1861; 5. Roy, pupil of MM. Boulanger and J. Lefebvre—born in 1853; 6. Friant, pupil of M. Cabanel—born in 1865; 7. Charpentier, pupil of MM. Bouguereau and Tony Robert-Fleury—born in 1858; 8. Baschet, pupil of MM. J. Lefebvre and Boulanger—born in 1862; 9. Millochan, pupil of MM. Cabanel and Feyen-Perrin—born in 1856; 10. Pichot, pupil of MM. Cabanel and Bertrand, 2nd Grand Prix of 1879—born in 1857. The definitive judgment, which is based not only upon this part of the competition, but also upon the performances of the ten artists in the two previous stages, will be made known on the 28th inst.

In the half-yearly sculpture competition at the Ecole des Beaux-Arts, third medals have been awarded to M. Dubut, pupil of



MM. Dumont and Bonnassieux, and to M. Larche, pupil of M. Falquière; while in the medallion competition from the antique a second medal was obtained by M. Deman, pupil of M. Cavelier, and third medals by M. Brincourt, pupil of M. Cavelier, and by M. Belloc, pupil of MM. Dumont and Bonnassieux.

The late M. Coutan, a well-known collector, on his deathbed expressed a wish that several of his paintings should be presented to the Louvre. In accordance with this desire, his heirs, M. and Mdme. Milliet, requested M. de Ronchand, Director of the National Museum, to make his own choice out of the numerous works contained in the collection, and that gentleman has selected *La Chapelle Sixtine*, by Ingres; a *Christ*, and an *Allegory representing the Marriage of Napoleon I. and Maria Louisa*, by Proudhon; and two paintings by Géricault.

## BRISTOL AND CLIFTON JUNIOR ARCHITECTS' SOCIETY.

THE council and members of the above society met at the Fine Arts Academy, Queen's Road, Clifton, on the 13th inst., the principal object being the distribution of prizes to the successful competitors. Mr. J. C. Moncrieff presided, in the absence of the mayor of Bristol. The chairman, in presenting the prizes, said that it was customary to make a review of their position, the work done, the losses the society had sustained, and the advancement of architecture. The object of the association was that its members might work in harmony with the interests of the world, and that art might be more widely practised, better understood, and more admired. There had been of late years a tendency to devote more time to science than to art, and all must be fully aware that the art of building, &c., did not admit of perpetual discussion. The country-house built in the last century was not to be compared with the houses built nowadays. The builder of the present day sacrificed his money to place "gimcrack" ornaments in front of the building, and these were costly to keep in repair. The floors of the houses were so thin that sounds could be heard echoing from one floor to another, and the stormy breezes found their way through the small crevices. In former days they found mansions built with simple good taste and solidity. As a society they were indirectly responsible for building. How many of them were brought up to the idea that all buildings ought to have a good front! It was true that this question should receive more discussion and action. One of the fundamental principles of architecture was that it should be solid before ornamental, for ornament could not be applied to a building like the loose-fitting garments of the present day, to cover defects that were not supposed to be seen. How many inventors claimed that their inventions were cheap, and occasionally convinced them they were lasting? Let them look at the architectural buildings in the ancient city of Bristol, and compare them with the buildings now being erected with lumps of terra-cotta and highly suggestive chimney-pots. Were they what builders of the last century would erect? No doubt a constant and vigilant influence, checking with authority all that was bad in art, and showing favour to all that was good, would have a beneficial effect; and examples of solid, tasteful, and simple works might exercise an influence indirectly towards the chastening of taste. He might mention that that was the first year for obligatory examinations for admittance to membership of the Royal Institute of British Architects. The examinations had been made to raise the standard of education, and so keep out those who were wholly incompetent. They were inducements only to those hard-working and industrious students in the shape of prizes, and could only be gained by those who had achieved artistic excellence. He was pleased to inform them that the University had undertaken to deliver a course of lectures on the history of architecture, and they had appointed Mr. W. E. Jones, of Bristol, as lecturer, who, as they were aware, was well versed in the higher branches of the profession, and he sincerely trusted the students and members of the society would avail themselves of the opportunity of obtaining a thorough grounding in the science and art of building, which was the only means of making them proficient in their profession. There was, however, only one controlling influence, which all of them ought to make it their best endeavour to educate, according to their strength and means, namely, public taste. There were two classes in the society, the old and the young, and in the former he regretted to see many absent. The younger members were trying to work in a groove which ran parallel to their seniors, and he could not see why some means might not be devised for enabling them to do so. He felt that in the energy with which they pursued their work, and the high excellence of much of it, surely some plan could be devised amongst them. In doing so he hoped that they might not only be able to work together but also to be represented at the Council or Royal Academy as was suggested by the late president of that Institution.

Several new members having been elected, the chairman distributed the prizes in accordance with the subjoined list:—

COMPETITION No. 1.—*Measured Drawings*.—For prizes given by the council of the society and Mr. Joseph Wood (vice-president), to the members producing the best and second best sets of drawings, plotted from actual measurement, of any one edifice chosen from a given list—First prize, W. F. V. Francis, subject, entrance to Chapter House, Bristol Cathedral; bracketed equal in merit for second prize, F. E. L. Harris and H. T. Edwards, subjects, Norman Gateway, College Green, and Elder Lady Chapel, the Cathedral; extra prize, George E. Ford, subject, Elder Lady Chapel, the Cathedral.

COMPETITION No. 2.—*Essay Prize*.—For prize offered by the council of the society for the best architectural and historical description of any one of the buildings visited by the society during the year—Awarded to William E. Hill; subject, Bristol Cathedral.

COMPETITION No. 3.—*Design*.—For prizes offered by Mr. Wm. L. Bernard (vice-president) and the council of the society for the best and second best designs for a provision warehouse—First prize, William H. White; second prize, F. E. L. Harris.

Competition for prizes given by Messrs. J. Nicol Smith and Joseph Wood for the best set of drawings, plotted from actual measurement, of the doorway to Spicer's Hall, Welsh Back—First prize, William H. White; second prize, H. J. Edwards; extra prize, William Jane.

On the motion of Mr. W. E. Hill, seconded by Mr. W. H. White, the thanks of the meeting were given to Mr. Moncrieff for presiding. The chairman briefly returned thanks, and moved a vote of thanks to Mr. W. E. Jones for his kindness in looking over the drawings, and making selections for the different prizes. No one better qualified could have been selected for the work. He also proposed a vote of thanks to the donors of the prizes. Mr. Hill seconded the motion, which was agreed to.

## PUBLIC IMPROVEMENTS IN EDINBURGH.

THE eighth annual report of the Edinburgh Cockburn Association has been published. In it the Council of the Association deal with various questions of city improvements. In regard to the site of the old Infirmary, the Council say they are strongly impressed with the conviction that the opportunity, so seldom afforded, of acquiring an open space in one of the most densely populated quarters of the city, should not be lost, but that the site should be laid out as a public garden or recreation ground. The immediate neighbourhood suffers much from overcrowding and want of ventilation, while the attractions of the University would be enhanced by there being a garden either in front of it or at no great distance from it. In regard to the proposed bridge at Bell's Mills, the Council say they would view with alarm any proposal to widen the Dean Bridge—a process which could scarcely fail to injure that beautiful structure—and they believe a new bridge to the west of the present one would be much more suitable, affording as it would do a direct access to the grounds of Trinity Hospital at Blinkbonny, which the Council hope may one day be made available to the public in some form or other. They are of opinion that too little has been done in the way of supplying public parks, and suggest that, if Edinburgh had a public park at Blinkbonny, it could not fail from its situation to become one of the most charming spots in or around the city. The Council have ascertained with satisfaction that the feuars in Douglas Crescent and Belford Park have obtained a right of servitude over the ground in the intervening valley, which is to be laid out by the proprietor, Mr. Waddell, as a tastefully-arranged pleasure ground. While rejoicing that so much has been recently done to improve the city by planting along the streets, in the Meadows, and elsewhere, they again suggest that the line of trees in Princes' Street should be continued past St. John's Chapel. As to the proposed covered rock garden in West Princes' Street Gardens, the Council requested the municipal authorities to postpone their final determination until a more decided expression of public opinion should be elicited by public exhibition of the design of the proposed structure or otherwise. The Council are not aware that anything further has been done in reference to the proposal. The Council regret that the municipal authorities have not been able to see their way to acquire the strip of ground lying between the south boundary of the Arboretum and the Water of Leith, a result the more to be regretted, as the ultimate feuing of the ground in question will undoubtedly injure to a great extent the beautiful views of the city now to be obtained from the Arboretum.

The Town of Darlington has adopted the Free Libraries Act, and Mr. G. G. Hoskins, F.R.I.B.A., has been appointed by Sir Joseph Pease and Mr. Arthur Pease, the executors of the will of the late Mr. Edward Pease, to design and carry out the new library buildings.



## NOTES AND COMMENTS.

THE annual meeting of the Gloucestershire Archæological Society is to be held in Bath on the 25th inst. and two following days. There is an interesting programme. The proceedings will be opened by the reception of the Society at the Guildhall by the Mayor, after which the president will deliver an address. The Roman bath will be examined under the guidance of Major DAVIS, who is entitled to be called its discoverer. There will be a carriage excursion to Hampton Down, where, under the guidance of Prebendary SCARTH, the camp and the Wansdyke will be examined, and the chains of camps on either side of the Avon, with the ancient boundaries, fords, and roads. An evening meeting will be held at the Guildhall for reading and discussing papers, and there will also be a temporary museum. Thursday will be devoted to a carriage excursion to Little Sodbury and Dyrham, going up the Avon Valley along the line of the Foss-Way over Bannerdown, passing the "Three Shire Stones," and thence by the head of St. Catherine's Valley to Marshfield Church, Cold Ashton (church, parsonage, and manor-house), and Little Sodbury (camp and manor-house); returning to Dyrham (battlefield of Deorham, church and house), and through Dyrham Park over Lansdown (battlefield and camp) to Bath. A *conversazione* will be held at the Guildhall in the evening. On Friday, after a concluding meeting at the Guildhall, the members will proceed by special train for Thornbury (church and castle), calling at Iron Acton (church and cross).

THE annual meeting of the National Smoke Abatement Institution was held (as reported in another column) on Monday. The Lord Mayor, on the occasion, remarked on the improved atmosphere of the City during the last few years, now that City buildings were not so much used for dwelling-houses as formerly. It is not to be imagined that every Londoner can be expected to dispense with fires in his house while the knotty question of the efficiency of various types of heating and cooking machines, from coal-burning grates, stoves, &c., to gas apparatus, &c., is being solved. This is a work necessarily of experiment and time, and will, no doubt, be satisfactorily solved, if undue haste is not made in attempting too much with too little experience. What can be done, and should be done, is that measures should be taken to stop the volumes of smoke that are discharged into the London atmosphere as, we may say, a commercial speculation. Owners of factories, and such like, are not the only offenders. For one factory there are legions of bakers' and cooking establishments, hotels, &c., which play a very good second to any factory in the blackness and volume of smoke they emit. As these people make a handsome profit out of the public, they ought to be forced to consume their own smoke, or pay some very solid remuneration to the public in the way of fines, rather than be allowed to poison people and get well paid for so doing.

THE Criterion Theatre, Piccadilly, is to be lighted throughout with about 600 EDISON incandescent lamps. The generating plant will comprise two ARMINGTON and SIMS' horizontal high-speed engines, having 13-inch cylinder by 13-inch stroke, running at 275 revolutions per minute, and driving on to countershafting, from which will be run four EDISON L-dynamos, each capable of sustaining 150 16-candle lamps. Each engine will be capable of indicating 84 horsepower at 70 lbs. pressure, and either engine will thus be able to take the whole load in the event of accident or repairs to the other. The wiring will be arranged on eight circuits, each under independent control, by means of a specially-designed regulator capable of lowering or raising the brilliancy of the lamps from normal candle-power to *nil*. The contract for the work, which will be carried out by the Edison Electric Light Company, Limited, stipulates for the completion of the installation by the beginning of September.

BUILDING amenities have once again been a subject of notice by the Solihull Rural Sanitary Authority. At a meeting of this body on Wednesday Mr. T. W. WHITLEY, C.E., submitted a report on some buildings erected by Mr. KENT, a member of the Board, at Olton. Mr. WHITLEY said on examination he found the foundations and footing of the buildings to be contrary to the by-laws, the walls being built other than upon solid ground, and upon an artificial foundation made up of loose materials not suitable for the purpose. These materials con-

sisted, not of concrete, but of a very large preponderance of wet red sand, with a large proportion of lime riddlings, not mixed thoroughly together, having no binding properties, and being loose, damp, and so soft that it was most easily got from under the footings of the walls with a common walking-stick. The underpinning was awkward, dangerous, and unsatisfactory. Mr. WHITLEY pointed out in conclusion that in a similar case a heavy fine had been inflicted. Mr. KENT, as was natural, did not see the matter at all from the same point of view as Mr. WHITLEY, and considered there must be some ill-feeling on the part of the surveyor towards him. The chairman, however, having gently recalled Mr. KENT to order, that gentleman eventually consented to put concrete under the foundations, and if that did not, in the opinion of the surveyor, render the buildings secure, to take them down and rebuild them. Less than this Mr. KENT could hardly have done, though, considering his official position, he would have been wiser in the first instance not to have transgressed the laws which he has been appointed to uphold.

THE advantage of concrete as a fire-resisting material is shown by statistics of the Paris Fire Brigade during the past year. It appears that 982 fires were dealt with during that period by the Paris firemen. Of these 696 were of more or less trifling proportions, involving only single rooms, doors, &c.; 267 of greater gravity, such as workshops, building yards, and warehouses, while no more than 19 would be regarded as being serious. The estimate of the losses in 977 cases of fire was 7,729,315 frs., of which 7,590,100 frs. were the result of 274 fires in which the average loss amounted to 27,701 frs. per fire. For 703 other fires the loss was 139,215 frs., or an average of 198 frs. per fire.

It may seem somewhat remarkable to find a Duke appearing in a police-court, but as such a court is the special tribunal for cases under the Metropolitan Building Act, and as dukes own property in London, there need be no surprise. On Wednesday the Duke of BEDFORD was summoned to Bow Street to pay district surveyors' and other fees. Some stables belonging to His Grace, in the parish of St. Pancras, were about to be removed, when the district surveyor telegraphed to the contractors that a hoarding must be erected. Afterwards he reported that the stables were "dangerous," and the Duke was called on to hoard them in taking them down, and before this could be complied with, the hoarding was erected at the instance of the surveyor by the Board's contractors. When the case was heard it was shown by counsel, on behalf of the Duke of BEDFORD, that the building *per se* was not a "dangerous structure" within the meaning of the Act, and that any question of hoarding during the pulling-down was governed by the Metropolis Local Management Act, and not by the Building Act; that all proper care and precautions were taken, and that the district surveyor had mistaken his functions in ordering the Board's contractor to hoard in the building. The magistrate was of the same opinion, and the summons was accordingly dismissed.

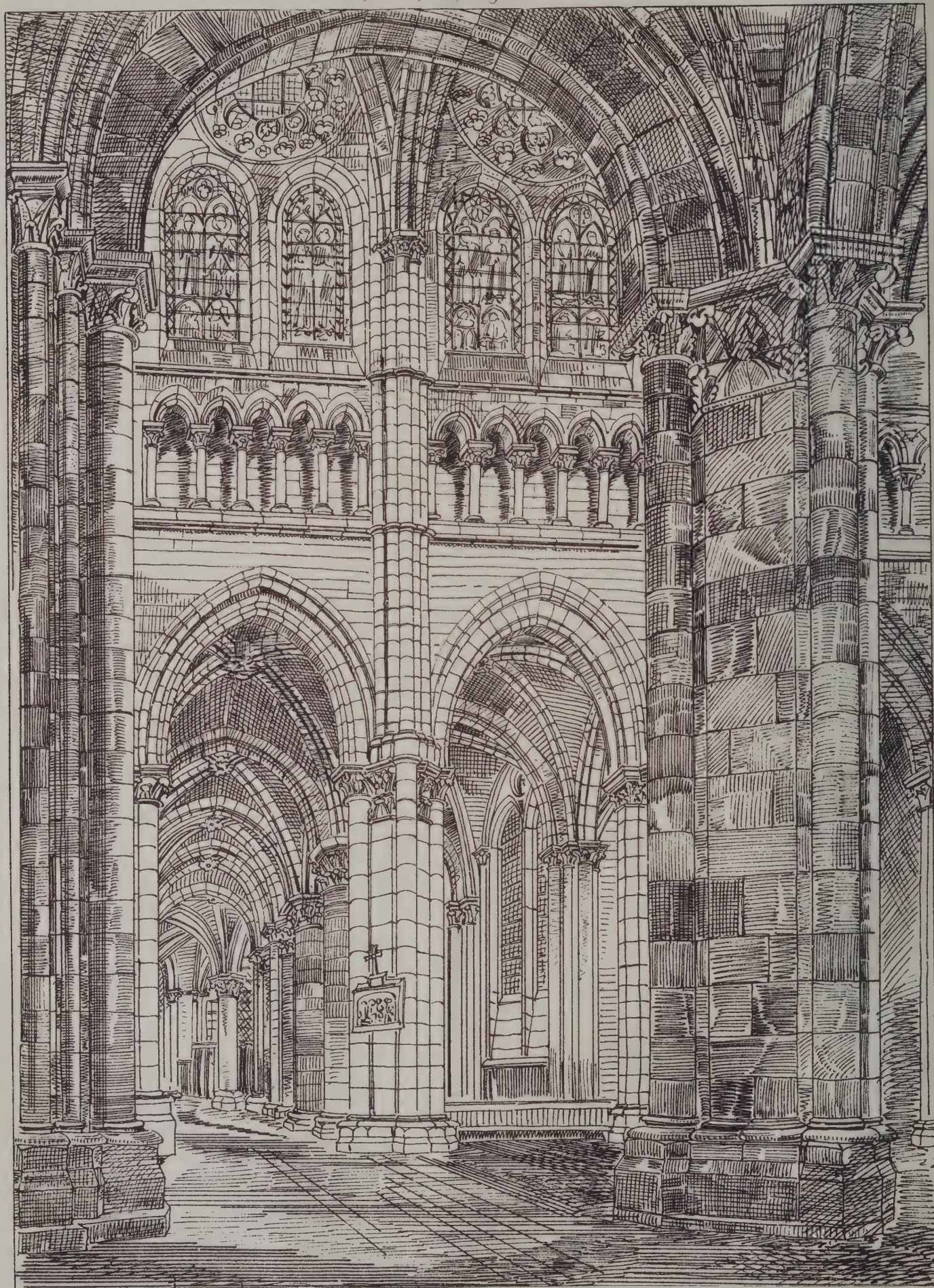
A DECISION of Mr. Justice MATHEW shows that all the judges do not consider the angle of forty-five degrees to be indispensable to equity in light and air cases. The owner of a coffee-house in Rotherhithe Street took an action against a firm who are erecting large works on the opposite side of the street, which is only 21 feet wide. The coffee-house was not of imposing height, and it was claimed that a low light was of greater value than is usual. The new wall of the opposite premises is 13 feet 6 inches higher than the old wall. After hearing evidence, the judge was of opinion that there was injury, and damages of small amount were awarded.

A NEW description of writing-paper has been issued by Messrs. WALKER & Co., of Farringdon Street. The novelty consists in the imitation of the so-called crocodile leather, and other varieties resemble morocco and Russia leathers. The material, considered simply as paper, is far superior to the best writing papers. It is of good colour, is smooth in surface, besides being thick. But there is a want of fitness in paper which imitates leather. Parchment and vellum are of use for deeds, but they are different in texture from the leather which is prepared by curriers. The inventors could have found a grain far more suitable among the plant forms. There is, too, an objection in the crocodile pattern, inasmuch as it is difficult to write in straight lines over the indentations.









*Sprague & Co. 22, Mark Lane, Cannon St. EC*

CHARTRES CATHEDRAL.  
VIEW IN S. TRANSEPT LOOKING EAST.  
Drawn by ARTHUR KEEN.

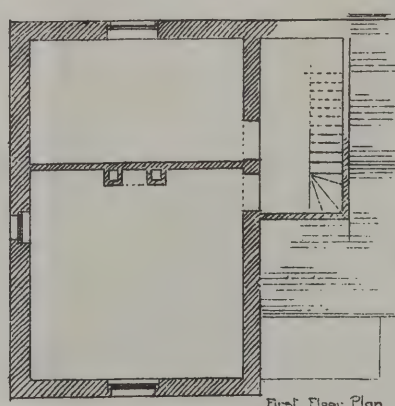
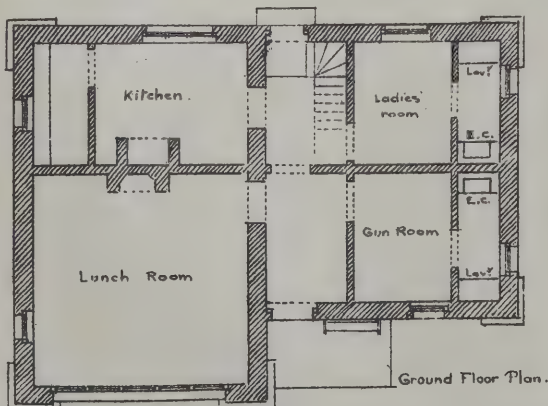








S. J. Newman, del. 1883.



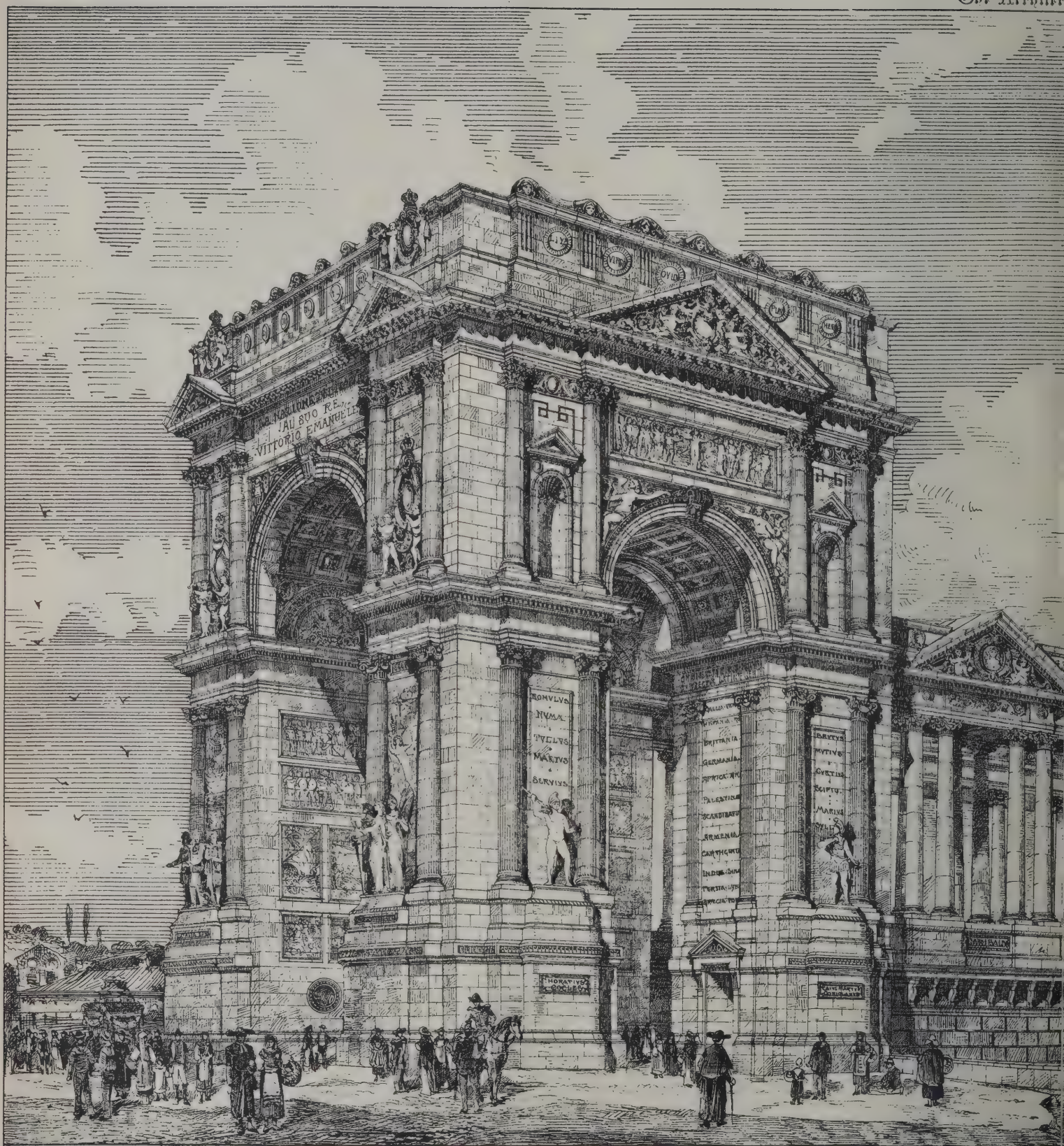
Shooting-  
Box &c.

Samuel J. Newman.  
A.R.I.B.A.  
Architect.  
32 Abington St  
Northampton.







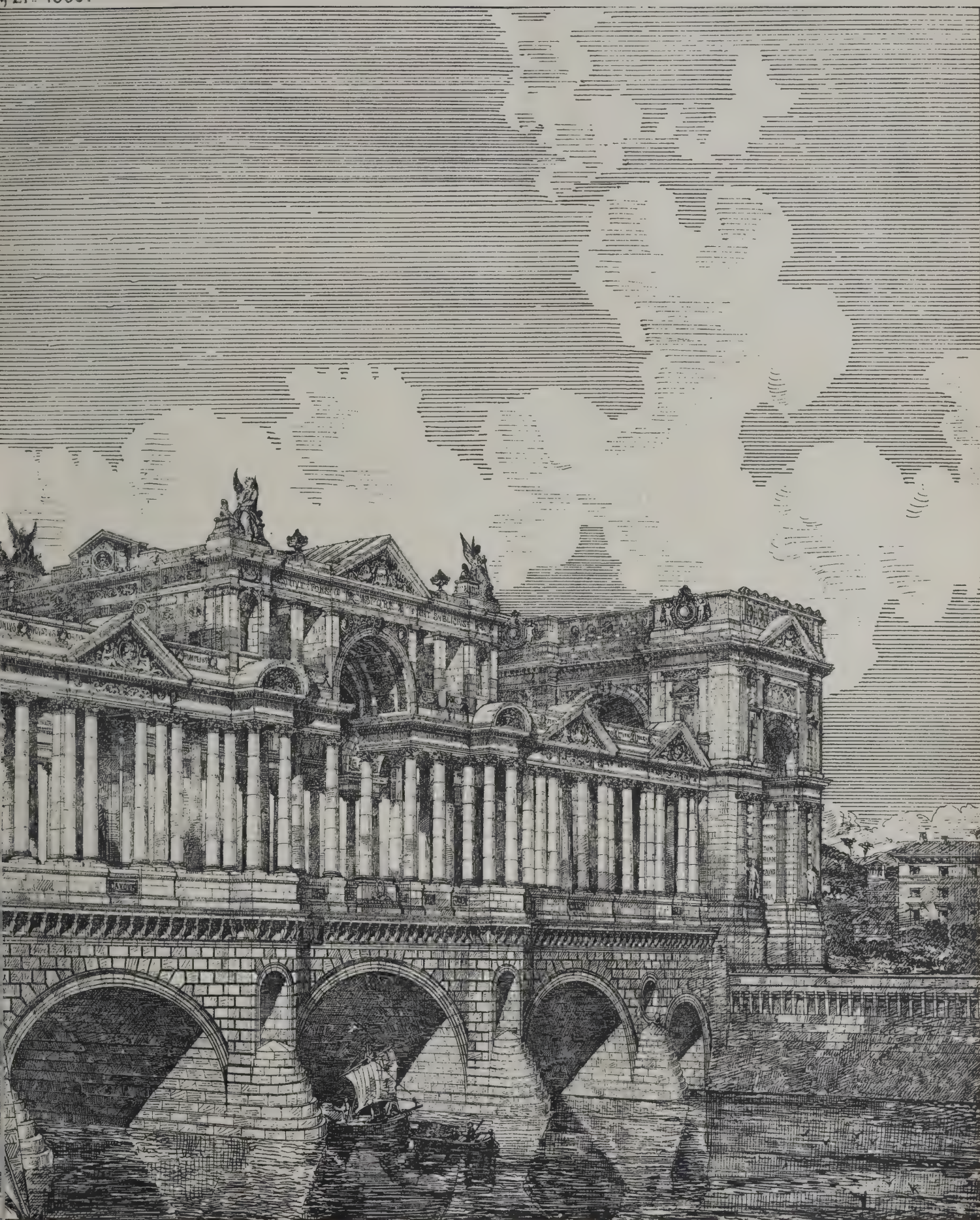


IN MEMORIAM AL S.M. VITTORIO EMMANUELE II  
 IL RE PRIMO D'ITALIA  VEDUTA DEL PONTE  
 IN LUOCO ANTICO PONTE SUBLICIVS IN ROMA 

DESIGN FOR THE VICTORY ARCH  
 [ PROPOSED REBUILDING OF ]  
 By DANIEL



21<sup>st</sup> 1883.



# EMMANUEL MEMORIAL.

POSS SUBICUIS, ROME. ]

ADE. FRIBA.









NEW PREMISES, 296, MILE END ROAD, E.

FOR MESS<sup>rs</sup> OSOSKI & SON.

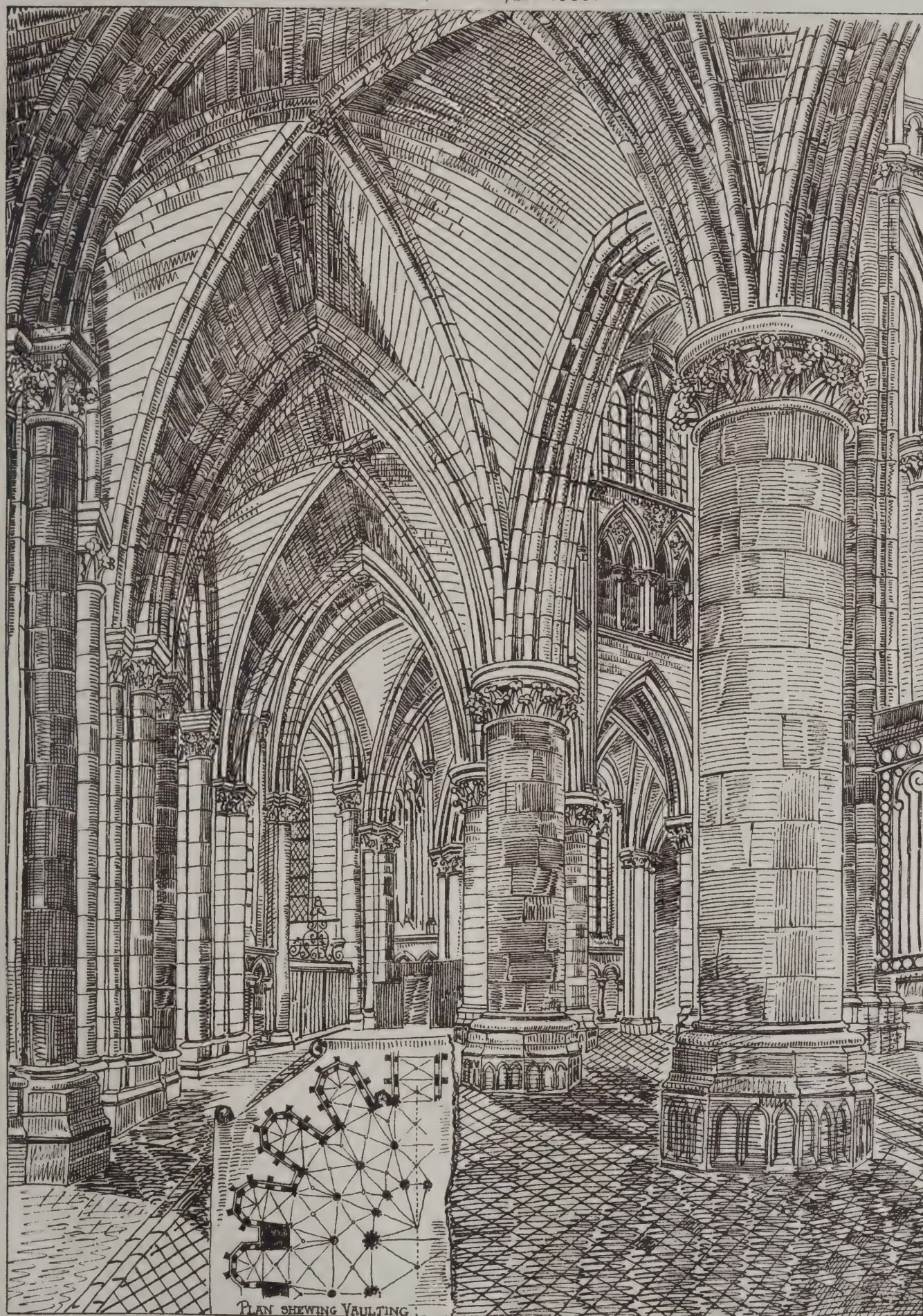
W SECKHAM WITHERINGTON, F.R.I.B.A. ARCHITECT,

STANLEY & CO. 22 MARK LANE. LONDON. E.C.









LE MANS CATHEDRAL.  
VIEW IN NORTH AISLE OF CHOIR.  
Drawn by ARTHUR KEEN.







## ILLUSTRATIONS.

DESIGN FOR THE ITALIAN MEMORIAL OF VICTOR EMMANUEL.

WE publish this week an illustration of the design which was submitted by Mr. DANIEL BRADE, F.R.I.B.A., of Kendal, in the competition for the National Memorial of King VICTOR EMMANUEL. It was one of the designs to which a gold medal was awarded. A drawing of the design is in this year's exhibition of the Royal Academy.

The following is a translation of the report which Mr. BRADE sent with his design:—

"In submitting herewith the accompanying design for a memorial to the late King VICTOR EMMANUEL II., I would add a few words in explanation of the design. As will be seen, it is proposed to construct a bridge across the Tiber, at or near the locality of the ruined Ponte Sublicius. The bridge would be flanked by triumphal arches at each end, and with colossal groups of statuary (varied), and along the bridge on both sides, double colonnades vaulted at top, the central portion forming a grand cortile or larger loggia. I would enrich the faces of the triumphal arches, and the friezes and spaces suitable, with statuary, sculptured decoration, inscriptions, and names of illustrious men and women of Italy—both ancient and modern—the form and nature of the structure being designed specially for and adapted to this purpose. The bridge and arches throughout and the abutments and river walls to be in stone, and the faces in Travertine stone, the columns of the triumphal arches in marble, and the capitals in bronze. The bassi reliefs in bronze or marble of varied colours.

"As to the estimated cost, it will be judged from the nature of the memorial that it need not be carried out in its entirety, as to statuary and sculpture, at once. The large groups of statuary and decorative features can be erected in materials more or less costly, from time to time as funds permit, and they may be devoted partly to the commemoration of *future* notabilities and events of Italian history. But taking the work as herein indicated complete, with its pediments, cornices, coffered soffits, festoons, columns, and all architectural and sculptured carving (as apart from the human figure), I estimate the cost at 7,500,000 Italian lire, or 300,000*l.* sterling, leaving a sum of 60,000*l.* sterling to complete the statuary groups and artistic works named—say, in total lire, 9,000,000.

"In conclusion, I may briefly explain the *motif* or reasons for giving my design the form adopted. Firstly, I consider that a memorial of this nature should be adapted mainly for and to its own special purpose, else it is not worthy of erection at all. The popular notion of coupling some other object therewith, such as a hospital, college, charitable or religious establishment, or other utilitarian scheme, is a vulgar and an ignoble one. For a great and national work the object commemorated is worthy in *itself* the cost and sacrifice involved in its creation. But if, as no doubt it is desirable, that a large structure like this should serve *some* practical purpose, I would point out that no more noble or useful purpose could be associated therewith than a public bridge, and on a place hallowed by one of the most heroic achievements of Latin history, the defence of the old Sublician bridge by HORATIUS COCLES.

"Further, I have conceived the idea that the reunion of the severed banks of the Tiber, as shown in this bridge, is a project worthy of associating with the union of the great Latin people and the consolidation of its empire and future greatness, as inaugurated and perfected by the late King VICTOR EMMANUEL II."

The *Pons Sublicius* was the oldest and most interesting of the Roman bridges. Nothing is left of it at present except some of the foundations of the piers, visible at low water. Originally of wood, or *piles*, from which it takes its name, it was noted as being the bridge defended by HORATIUS COCLES, who in person withstood the entire army of PORSENA till the retreating Romans succeeded in breaking it down behind him. It was subsequently rebuilt at three different times as a stone bridge, and finally destroyed by an inundation in 780, but some of the broken arches and the piers existed till the middle of the fifteenth century.

NEW PREMISES, NO. 398 MILE END ROAD, E.

THIS building is in course of erection for Mr. L. OSOSKI, and is intended for use as a wholesale clothier's. The works are being executed by Mr. J. PARFITT, from the design and under the superintendence of Mr. W. SECKHAM WITHERINGTON, F.R.I.B.A., 79 Mark Lane, E.C.

## SHOOTING-BOX.

THE accompanying illustration shows a design for a small lodge, or shelter, for the convenience of shooting-parties, and a convenient resting-place for ladies, also to save the trouble of carrying about much of the impedimenta incidental to shooting-parties. The estimated total cost is 430*l.* Mr. SAMUEL J. NEWMAN, A.R.I.B.A., is the architect.

LE MANS CATHEDRAL.—VIEW IN NORTH AISLE OF CHOIR.

CHARTRES CATHEDRAL.—VIEW IN SOUTH TRANSEPT.

BATLEY COTTAGE HOSPITAL.

LAST week an illustration was given of the new Cottage Hospital in Batley. For many years the work of the hospital has been carried on in an old four-roomed house at Purlwell, which was rented for that purpose, but it was found far too small and inconvenient for the requirements. The committee therefore resolved to provide a substitute. A site was obtained in 1880 from Lord WILTON. It is conveniently situated outside the busy part of the town, in Carlinghow Hill, leading to Upper Batley, where there are many suburban residences.

In December of the same year contracts for the whole of the works were let, amounting to 3,850*l.*, several liberal subscriptions having been promised. Mr. WALTER HANSTOCK, A.R.I.B.A., was appointed architect, his services being rendered gratuitously in order to give aid to the project.

The works are now finally completed, and the total cost of the building, fence walling, entrances, gardens (forming and planting), extra walling on account of enlargement of the ground, new iron railing, road on low side premises, marbles, stoves, cooking-ranges, gas-fittings, &c., amount to 4,512*l.* Beyond this the furnishing of the establishment has cost 350*l.*, making the total outlay for building and furnishing complete 4,862*l.*

The sum of 3,600*l.* has been received in subscriptions. In 1882 the ladies of Batley held a bazaar on an extensive scale, which was acknowledged on every side to be a splendid success. From the proceeds of this bazaar the ladies handed over to the committee the large sum of 2,615*l.* 19*s.* 5*d.* net, then making the total amount of cash in hand from all sources 6,215*l.* 19*s.* 5*d.*, and leaving about 1,300*l.* to start the endowment fund. This fact, in the face of depression of trade and bad times, speaks remarkably well of Batley with its 30,000 population.

The aim of the promoters has been to make the Batley Cottage Hospital one of the best models in England, and many good examples were examined before it was designed.

The building was opened by the Earl of WILTON on March 27, 1883.

## EXHIBITION OF TURNERY.

THE Turners' Company will hold their annual competition in the art of hand-turning in wood, ivory, and metal at the Mansion House in October next. The prizes will include the freedom of the company and various medals and certificates of merit given by the guild, and money prizes offered by the Baroness and Mr. Burdett-Coutts, the Master (Mr. C. W. Turner), Mr. A. P. Bower, Mr. F. Young, and Mrs. Begley. Special prizes will be given to apprentices. In the wood and ivory classes, the qualities essential to success are beauty of design, symmetry of shape, utility and general excellence, exact copying, fitness of the work for the object proposed, and novelty. In the metal classes, the essentials are truth in turning, accuracy in fitting and finish, exactness in copying, due proportion for stability and strength, and elegance in form. The judges will be, in wood and ivory, Sir F. Leighton, P.R.A., Mr. Bower, Mr. Brindley, Mr. Burdett-Coutts, Mr. Holtzappel, and Mr. Josolyne; and in metal, Sir H. Bessemer, Sir C. Hutton Gregory, Sir William Siemens, Mr. C. Douglas Fox, and Mr. John Jones. The Lord Mayor will distribute the prizes on October 26. Dr. R. T. Pigott, of 36 Southampton Street, is the hon. secretary of the Competition Committee.

The Duke of Westminster has given a piece of ground as a site on which a new vicarage for St. Mark's Church, North Audley Street, Grosvenor Square, may be built. The value of this gift is estimated at about 3,000*l.*



## ROYAL ACADEMY.

THE following students have been admitted to the Architectural School of the Royal Academy:—

*Upper School.*—F. W. Besant, G. E. T. Lawrence, T. Maclaren, G. F. Oakeshott, T. Ward.

*Lower School.*—C. H. Aitken, W. Brown, S. R. Clemence, E. L. Condor, A. Crow, G. G. Dawber, R. M. Fell, Frank Fox, C. Littlewood, E. Herbert, C. S. Hornabrook, W. C. Jones, F. W. Lane, Henry Ling, C. E. Malloes, J. C. S. Mummery, A. B. Pite, S. H. S. Seager, W. E. Symington, W. A. Thompson, J. M. Townsend, W. R. Tucker, H. J. Westell, C. F. E. Yonge.

*Probationers.*—Louis Ambler, C. S. Appleton, W. H. Bidlake, Frank Brown, C. A. Coxhead, H. W. Crickmay, W. J. W. Ferguson, T. P. Figgis, H. R. Goodrham, F. C. Hart, John Lord, F. S. Ogilvie, E. C. Pickford, T. B. Rutherford, H. D. Walton, R. W. Williams, G. G. Woodward.

## PROPOSED ART SCHOOL FOR BLACKBURN.

A MEETING was held in the committee-room of the Town Hall, Blackburn, on Monday, to promote the establishment of a local school of art. In the absence of the Mayor, Mr. James Hoyle, the chair was taken by Mr. Wm. A. Abram. A resolution to the effect that it was desirable to establish a school of art for the borough, in connection with South Kensington, was proposed by Mr. F. C. J. Stock, who observed that the movement which had called them together was not new, and had not arisen from a sudden impulse, but was the result of a feeling that had existed for years and only wanted a favourable moment to be called into activity. A generation ago art was only a conventional thing. That was seen in the exhibition of works of art that took place occasionally, and in the character of domestic decoration, in the flaming and wonderful designs for wall-papers, carpets, pottery, and glass, and in the silks for ladies' dresses. In all times and all countries when wealth had been accumulated the people craved for the enjoyment of that wealth in a rational and befitting manner, as was seen in the case of the Greeks and Romans, the chief nations of the continent of Europe, and, finally, up to a certain point, of China and Japan, from which countries there now came models of the best taste. The renewal and improvement of taste in the country was due to the establishment of art schools, which had all been more or less successful. The schools of art naturally led to the feeling that they should be combined with technical schools, and there they trod on familiar ground. As men of business they ought to see that their workpeople were not handicapped in the race, but were placed in a position to win the race if possible. Art in its modern application was practically the twin sister of industry. There was no reason why a school of art should not be established in Blackburn. They only wanted to start in a modest way, and let the future of the school be guided by the measure of success attained. Mr. Luke S. Walmsley seconded the resolution.

An address followed by the Head-Master of the Manchester School of Art, Mr. Willis, who, as illustrations of the general statements made by the previous speakers, mentioned the case of a country lad who had attended a school of art and was made foreman by a large builder when he had completed his apprenticeship, and who, after obtaining a similar position with a London firm, commenced business on his own account; of a carpenter who had become a flourishing builder; and of a young house painter who was now a gifted designer in the employ of a leading firm of furniture designers and makers in London. The last-named, after attending a school of art in Limerick, secured one of the national scholarships given to those who excelled in design, tenable for two or three years, and amounting to sums varying from 1*l.* to 2*l.* per week. The intention of the department in offering the scholarships was to induce the most gifted students to go to London for instruction, and there receive all the advantages which the resources of wealth could give, and then to return to be the exemplars of the kind of work that should be done. That had been done to a large extent, particularly in towns where there was a great demand for artistic productions. From the school at South Kensington there had been sent out teachers to centres of civilisation all over the kingdom, and now there were in different parts of the country schools that any man might be proud to attend. The movement was still growing, and if Blackburn, which was now very much behind, did not make a move it would be still further left behind. He hoped, however, that there was sufficient energy, money, and public spirit in the town to make a good start now that the matter had been mooted. He found a very decent little art school at Accrington, and the people of Preston were fully alive to the immense advantages that education conferred. In days gone by education was not much thought of, but now the race was to the educated, whether as working men, professional men, or business men. They had sent some of their members as pioneers throughout the country to glean all the information possible as to the most recent methods of doing everything, and now they were applying that information. They were to have a technical school connected with the art school; there were also science classes, and all the higher

education of the town was to be centred in the Harris Institute; and they were determined to have the best teaching they could get. In other towns, certainly very different from Preston, similar work was being done. Nottingham some years ago was overwhelmed with French designers, and he supposed that at that time the people thought the English mind was incapable of designing anything. But, before Mr. Roe, of the school of art, left it, he had the satisfaction of seeing the last French designer leave the town, and French firms buying designs from English designers. Such a change had taken place that French fashions were designed by Englishmen. Everywhere Continentals, if they wanted a fashionable coat, sent to England to have it, and the Paris fashions were designed by a Lincoln man. In Birmingham close upon 40,000*l.* was being spent upon a school of art and art gallery. The Manchester people had spent 20,000*l.* upon their school of art, and no doubt, if necessary, would spend a further 20,000*l.* Liverpool was just spending an enormous sum on a grand school of art, and there were also Bolton and Preston with art schools. When coming to the meeting he began to make a list of schools in towns with under 7,000 inhabitants, but he found the list would be so long that he gave up the task. Those facts showed the lack of art culture in Blackburn, and he hoped the reproach would be taken away from the town. An unique opportunity was offered in Blackburn at present. A new and magnificent grammar school was being built, and a high school for girls established, and the proposal for the foundation of an art school came in the nick of time, for he thought they ought to centralise their system of art teaching. They were unencumbered by any old traditions, had no old interests to hamper them, had no old systems to knock on the head, and had not to wait until some one died to institute a new and better state of things. He recommended them to start art classes at once, because the students received now would be quite incapable of taking advantage of a higher institution; but by the time that higher institution was obtained—and if they did the work properly, as he trusted they would, it would take some time—the students would have gone so far that it would come in for them, and there would be a circle of students to fill the new institution. He advised them to collect information, obtaining it not only from the most reliable sources in England, but elsewhere, and do as the people of Huddersfield and Bradford had done—establish a grand institution both for art in its higher forms and for technical education, or the practical application of art to local industries. In France technical education was being carried to a very high pitch, and in some places their technical schools were in advance of their requirements, as, for instance, at Lille, where there was a very large technical school, and no one to occupy it. At Birmingham it was proposed to obtain powers to erect a school of art and transfer the present school to the Corporation, and powers for the management of the new school and to defray the cost from a rate under the Free Libraries Act, the limit of 1*l.* in the pound imposed being removed in order to accomplish that object. That was done in France, where a school of art was a municipal institution, and had very large sums of money bestowed upon it. While the English commissioners reported in 1851 that English products were in danger of being driven from the market, the French commissioners at the last International Exhibition reported that the English had made such vast strides in design that French goods were in danger of being beaten out of the market. That fact ought to convince them that there was some good in art education.

Mr. W. H. Brewer, M.A., H.M.I.S., also supported the formation of an art school, and trusted that it would eventually lead to the establishment of a "Technical School." An offer was made on behalf of a local gentleman to give 20*l.* per annum for five years in support of the movement. That Blackburn, until now, should occupy but a secondary position in regard to art education, in comparison with towns of less industrial and commercial importance, was much regretted, and the subject was so warmly taken up by all the gentlemen present that there is no doubt the establishment of a local school of art will be an accomplished fact in a short time. A local committee was formed, including the mayor, Mr. James Hoyle, Mr. Joseph Brierley, C.E., the Town Clerk of Blackburn, Mr. W. E. L. Gaine, Mr. A. W. R. Simpson, architect; and Mr. Wm. S. Varley, architect; the hon. secretary (pro. tem.) being Mr. Wm. Ditchfield, Clerk to the School Board.

## METROPOLITAN OUTER CIRCLE RAILWAY.

THE Metropolitan Outer Circle Railway Bill, which has already been sanctioned by the House of Commons, has passed unopposed through the House of Lords. By this Bill powers are given to that company to deviate from their authorised line of last session by constructing a railway commencing in the parish of East Ham and terminating in the parish of West Ham, so as to form a junction with the authorised line of the Regent's Canal, City, and Docks Railway Company. The Bill also sanctions the abandonment of so much of their authorised lines as will be rendered unnecessary by the above deviation, and further enables them to raise 66,000*l.* capital in addition to the 2,000,000*l.* sanctioned last year.



THE BIRMINGHAM FREE LIBRARY.

AT the meeting of the Birmingham Town Council, on Tuesday, a report was submitted by the Free Library committee, with a statement of the accounts for the rebuilding of the Central Reference and Lending Libraries, giving the exact financial position of the Free Libraries Department on December 31 last, as follows:—

COST OF RESTORATION OF CENTRAL LIBRARIES.

Buildings . . . . .	£36,391 19 0
Fittings . . . . .	13,383 2 2
Decoration . . . . .	800 0 0
Miscellaneous Expenses, viz.:—	
Insurance . . . . .	£35 2 3
Miscellaneous work done before fire . . . . .	144 1 6
„ in connection with fire . . . . .	193 2 1
„ in old building consequent upon fire, and preparing for re-building . . . . .	255 15 6
„ in connection with Art Gallery . . . . .	218 15 5
„ opening ceremony . . . . .	84 14 10
	931 11 7
Clerk of Works . . . . .	400 9 0
Architects' commission . . . . .	3,068 13 0
	3,469 2 0
	£54,975 14 9

It is explained that the difference between 2,575*l.* (the usual commission of 5 per cent. on 51,506*l.*) and 3,068*l.* 13*s.* is due to the fact that previous to the fire the architects had prepared many sets of plans for the alteration and extension of the former reference library which were not carried out, and for which they were allowed 493*l.* 13*s.*, which, added to the 5 per cent, makes up the 3,068*l.* 13*s.*

As compared with the estimates approved by the council, the account will stand thus:—

	Actual Expenditure.	Excess.
Amount actually expended on buildings . . . . .	£36,391 19 0	
Amount authorised by the Council, by minute 11,615 (May 20, 1879) . . . . .	32,000 0 0	
	£4,391 19 0	
Amount actually expended in fittings . . . . .	13,383 2 2	
Amounts authorised by the Council, by minute 12,860 (February 7, 1882), viz.:—		
Messrs. Barnsley for shelves . . . . .	£7,698 0 0	
Messrs. Haden & Son, heating . . . . .	1,140 0 0	
Messrs. Strobe . . . . .	1,711 4 0	
	10,549 4 0	
	2,833 18 2	
Add decoration . . . . .	800 0 0	
Total excess of expenditure in buildings and fittings . . . . .	£8,025 17 2	

SANITARY PRECAUTIONS FOR LONDON.

AT a meeting of the City Commissioners of Sewers, on Monday, Dr. Sedgwick Saunders, the medical officer of health, reported that much alarm having been created by premature speculations on the probability of cholera reaching this country during the autumn, and as the Government had issued orders and regulations on the subject, and as the general working of the sanitary department of the City had been criticised in various directions, it seemed desirable to see how far censure was deserved. Their system of organisation was not perfect, many of its defects being remediable, while others were beyond their control. The medical officer of health had to bear all the obloquy attaching to nuisances arising from foul sewers, mephitic exhalations from ventilating shafts, badly-placed gullies, and overlaid catchpits, though he was powerless to prevent them. The restrictions placed on sanitary authorities by legislative enactments, the leniency of the magistrates in deciding complaints by sanitary officers, and the clashing of various departments, seriously embarrassed the action of the medical officer, and the efficient discharge of his duties in the face of any epidemic of magnitude. The primary function of a sanitary authority was the prevention of disease, and that, in the class of ailments connected with zymotic action, could be largely secured by rigid cleanliness, pure air and water, and perfect ventilation. In order to minimise the danger of such a visitation as cholera they should at once endeavour to eliminate from them those elements which acted as factors in its production, and regulated and governed its virulence. The sewers should be flushed oftener than at present, and deodorants used occasionally. Foul gases from the sewers should be intercepted by providing a filtering medium of freshly prepared charcoal at the junction of

the ventilating shaft with the roadway, and by closing the gratings in the roadways altogether, and carrying a pipe, having a *minimum* diameter of 6 inches, from the top of the ventilating shaft to the roof of an adjoining house. The catchpits in connection with the street gullies should be emptied and deodorised every 24 hours. The roadways should be sprinkled daily with water containing some germicide. The courts and alleys should be flushed and deodorised daily, and the entrances and side walls of the narrower courts lime-whitened occasionally. All house refuse should be removed daily, and the public dustbins emptied twice a day. The regulations for the removal of hog-wash and all kinds of animal and vegetable refuse from taverns and restaurants should be stringently enforced. Stables and cowsheds should be frequently inspected, and persons conveying offensive material through the City during prohibited hours should be prosecuted. Special examinations should be made into the condition, location, and water supply of cisterns in houses and public buildings. The superintendent of scavenging should be placed in direct communication with the medical officer of health, and be subject to his orders. The common lodging-houses should be put under more direct control, and each one properly registered. Prosecutions should be systematically instituted against offenders under the Smoke Nuisance Act. The food inspectors should be enjoined to increased vigilance in detecting and seizing every description of unsound food, including meat, fish, fruit, and vegetables. On the appearance of the first well-authenticated case of cholera of the true Asiatic type, a house-to-house visitation by competent medical men should be at once commenced. He would advert to the paramount importance of close attention to the condition of the water supply. The general consensus was that water was the great carrier of all poisons which emanated from the *dejecta* of enteric diseases. The water should be analysed from time to time, and the position and cleanliness of the cisterns carefully considered. The report was ordered to be printed and circulated, and referred to the Sanitary Committee.

THE THAMES COMMUNICATIONS.

AN important report by the Works and General Purposes Committee was adopted at the meeting of the Metropolitan Board of Works on Friday, last week. The Committee stated that they have had under consideration the several references from time to time made to them by the Board with regard to suggested means of communication between the north and south sides of the River Thames east of London Bridge, and also with reference to two extensive street improvements which have been brought under the notice of the Board, namely—the widening of Parliament Street, and the improvement of the approaches to the Law Courts. The question of providing efficient means of communication between the two sides of the river below London Bridge had long occupied a prominent position, and was admitted to be one of pressing importance. Various proposals have from time to time been made for dealing with the matter, and numerous memorials have been received from local bodies and others on both sides of the river urging the desirability of steps being taken to provide the means of communication required. As regards the proposed widening of Parliament Street, a communication was in the latter part of last year received from the First Commissioner of Her Majesty's Works, &c., intimating that the Government, having decided to erect the new public offices on the site between Parliament Street and Spring Gardens, it became his duty to dispose of certain properties in Parliament Street, Great George Street, King Street, and Charles Street, which were acquired in the expectation that the site might be needed for the public offices, and that, under these circumstances, he desired to afford the Board the opportunity of purchasing the property in question, with a view to completing the approaches to Westminster Bridge and the Houses of Parliament, by widening Parliament Street to the same extent as Whitehall. The remaining proposal referred to in the report is the providing of a new line of communication between Holborn and the Strand, and the improvement of the latter thoroughfare in the neighbourhood of the Law Courts. This is a matter which has been before the Board for a considerable period, and as to the urgency of which many representations have been made. The committee have very fully discussed the subject of the foregoing proposals, and as to the desirability of steps being taken by the Board towards carrying them into effect, the conclusion arrived at being that it is, in the interests of the public, desirable that the Board should endeavour to carry out all the undertakings. With reference to the question of cost, whatever might be the particular plans ultimately decided on, a very considerable expenditure must be involved, and the committee have accordingly considered the financial aspect of the question. The Board have already made representations to the Government as to the expediency of continuing the coal and wine duties, which are now leviable only till the year 1889; and if the Board is to undertake the extensive and costly works of utility and improvement referred to in this report, it will be more than ever necessary that the time within which these duties may be levied should be prolonged. The resolution submitted by the committee recommended that the Board should obtain



power in the next session of Parliament to construct communications across the Thames east of London Bridge, to widen Parliament Street, and to improve the approaches to the Law Courts; and that, for the purpose of carrying out the same, Parliament should be asked to sanction the extension of the coal and wine duties.

### THE NATIONAL PRINTS AND DRAWINGS.

IN announcing the retirement of Mr. Reid from the office of Keeper of the Prints and Drawings, the *Times* called attention to the favourable opportunity afforded for facilitating the study of art by uniting the department of which he had been the director with the National Gallery. The recognition of the desirability of this step, so long demanded, has received general acceptance, and there is every reason to expect that the subject will be treated in such a manner as to satisfy both the public and the professional students. It is unnecessary to repeat the reasons for the amalgamation; they have been so often stated as to be familiar to all interested in the matter. A word, however, may be said to allay the fears of those who, knowing the National Gallery to be already pinched for room, think that under the new arrangement the pictures will be still more crowded. Pictures require what is called a top-light—that is, that the galleries should be lighted by sky-lights. Drawings and engravings are, perhaps, best seen by a side-light, as when the light is admitted by windows. Thus at the National Gallery the rooms are on the first floor, leaving a floor below unoccupied, saving by offices, and even at present the space is more than sufficient for this purpose. When the additional galleries are completed for the pictures there will necessarily be so much additional ground-floor admirably adapted for the new department. And it must further be remembered that after the expression of opinion, both in and out of Parliament, the whole of the ground now occupied by the barracks and Government stores must ere long be given to the National Gallery. The futility of the reasons for retaining the barracks in their present position has long been exposed. That they should prevent the natural expansion of an institution of such importance as the National Gallery is an absurdity, to say nothing of the danger to a priceless collection of works of art from causes to which barracks are certainly liable.

It is only to be expected that in making the change the authorities will study the procedure of foreign galleries in this matter, especially in those countries where a scientific method of arrangement has been adopted. At Paris the drawings are united with the pictures in the Louvre, the prints being in the national library at the Rue Richelieu. At Berlin prints and drawings are under one department, as with us, but are in the same building as the Old Masters. At Florence and Venice it has been accepted that the drawings cannot be divorced from the pictures; still, it cannot yet be said that the galleries of Italy in other respects are arranged on such a basis as to afford many suggestions that would be valuable to ourselves. The French system undoubtedly offers advantages in respect that it necessitates two directors, one for drawings and another for prints; and, considering the requirements of modern culture, and the vast additional amount of study necessary for mastering one subject, it can only be by a rare chance that a man can be found thoroughly versed in the knowledge of prints and drawings, or sufficiently so that his judgment can be thoroughly relied on for the acquisition of examples of both classes. It does not, however, follow as a matter of course that because the French have recognised the advantage of dividing the directorate that their division of the department is judicious. Herein it seems Berlin has made a step in advance in bringing the prints to their National Gallery. Because, though in the study of pictures the drawings give more important aid, still the engravings are also essential in many directions. The same may be said for the value of the pictures in regard to the due appreciation and understanding of engravings. There is one branch of the department of drawings which is likely to assume importance in the future, and which already has received considerable attention from Mr. Reid—that is, the reproductions by photography of foreign collections of Old Master drawings. Their arrangement and classification will add to the duties of the director, as the room required for their exhibition will make further calls on the space at his disposal. In connection with these facsimiles, it is matter of surprise that their value has not been more fully appreciated by those interested in our provincial museums. Instead of wasting their efforts in seeking to form their museums from the national collections in the metropolis, which would be simply rendering the latter useless for the study of art, they should set about making as perfect collections as possible of casts and photographs from the finest examples of ancient art. Whatever countenance the scheme alluded to may receive from politicians, we may rest assured it would have the most uncompromising opposition of all who make art the business of their lives, simply because, while the metropolitan museums would be wrecked, the provincial museums would be equally valueless, and all students would have to migrate to other countries, where a more rational system might still prevail. Supposing, however, what is more

likely to happen, that the organisers of provincial museums see the direction wherein lies their true interests, they will naturally look to the collection of photographs from drawings at the National Gallery as a model for imitation, and will as naturally apply for advice to its head.

The general expressions of regret at Mr. Reid's resignation have been accompanied by the acknowledgment that he possessed the rare faculty of a curator and to a very high degree. It would seem desirable that the country should endeavour still to benefit from Mr. Reid's exceptional knowledge, and at the same time it might pay a well-deserved compliment to a public servant by placing him in a position to assist in the organisation of a department he has so long superintended. The trustees of the National Gallery are supposed to be distinguished connoisseurs, and, however deep their interest in art, it is no discourtesy to say that none would claim the special knowledge of men who had concentrated their faculties on the subject. Indeed, the deeper their interest in the advancement of art in England and the prosperity of the institution with which they are connected, the more earnest would be their desire to secure the co-operation of specialists like Mr. Reid.

### SMOKE ABATEMENT.

THE annual meeting of the National Smoke Abatement Institution was held on Monday in the Egyptian Hall, Mansion House. The Lord Mayor presided. Among those present were the Duke and Duchess of Westminster, the Duke of Northumberland, Sir Lyon Playfair, Captain Douglas Galton, Sir W. Siemens, Sir Fred. Abel, Sir Spencer Wells, Sir F. Pollock, Mr. Ernest Hart (chairman of the Council), Colonel Makins, M.P., Colonel Fraser, C.B., Major-General R. W. Lowry, and others. Letters of apology were read from Lord Derby, the Archbishop of Canterbury, and others.

The Lord Mayor in opening the proceedings referred to the work of the society, and said that living as he had done in the heart of the City of London for seven or eight months of the year, he found, the houses being mostly used for business purposes, that the atmosphere of the City was much clearer than it was in former years, when the buildings were more used as dwelling-places than now. On a Sunday afternoon, when the City was quiet and not disturbed by traffic, and when the houses were comparatively empty, they could see a sky as beautiful as any Italian sky.

Mr. Ernest Hart read the report of the Council, which set forth that since the last public meeting they had carried into effect the resolution to establish and organise an association to continue in a more formal way the work the committee had hitherto carried on. Having examined the present state of the administration of the law for the suppression of smoke, the Council had made various communications to the Home Secretary upon the subject. In a recent communication addressed to the Home Office, it was pointed out that the analysis of the return of convictions for offences against the Smoke Acts in the metropolis, extending over a period of five years, proved that most of the fines inflicted for "first offences" were below the legal minimum of 40s., and actually amounted on an average to only 7s. 11d., while in subsequent convictions the fines were below the legal minimum of 80s., and averaged actually only 10s. 1d. The Council further pointed out that the treatment of the cases was very unequal, and that the present administration does not comply with the letter—far less the spirit—of the legislation. The returns showed the most extreme variation in the treatment of cases in the different courts. From careful investigations the Council had made, it was proved that a large number of works were actually carried on in London and elsewhere without causing a nuisance, and that smoke could be to a great extent, if not entirely, prevented. The Council considered that in view of the enormous extension of buildings and factories in London and the large towns in the kingdom, and in view also of the evidence that smoke could be, to a great extent, if not entirely, avoided, the scope of legislative enactments for abating smoke should be extended, and their provisions duly enforced.

The Duke of Westminster, in moving the adoption of the report, said the only *locus standi* he should have at a meeting of that sort was that he was the proprietor and representative of many thousands of those rank offenders in the shape of smoke-discharging chimneys. The smoke nuisance was not only a gigantic evil; but considering that the population of the metropolis increased by 40,000 annually, it was naturally an increasing evil. He believed it was an evil which might be very much modified; indeed, be believed entirely prevented. They had it on indisputable authority that the smoke which was unburnt annually was waste of a gigantic character. They had it on various authorities that the waste from this source annually was 1,000,000*l.* in London alone, and that with the damage done to buildings the sum lost each year was no less than 2,000,000*l.* The waste in the country generally might be calculated to be proportionate. Mr. Shaw-Lefevre stated that the damage caused by smoke to the Houses of



Parliament alone amounted to 2,500*l*. Besides this damage to property, there was the injury to health from having to dwell under a dense canopy of smoke, and one of the objects of a meeting like that was to endeavour to make the public realise, not only how the evil arose, but how it might be remedied by the application of inventions, by the diffusion of information, and by the awarding of prizes for improved appliances, until a way of escape was found from the great curse of smoke.

Sir Spencer T. Wells seconded the motion.

Sir F. Abel pointed out that though the burning of solid fuel might be rendered smokeless, yet large quantities of sulphur would escape into the air. The way to conquer that difficulty was by the use of gaseous fuel, which by a simple process could not only be made to serve the purpose of heating, but to produce a light which might even vie with the electric light in brilliancy.

The resolution was passed.

The Duke of Northumberland moved, "That the period has now arrived at which systematic inquiry is desirable into the application of the resources of technical science for the abatement of smoke now largely produced in industrial processes and in the heating of houses, as well as into the operation of the existing laws for smoke abatement; and that the Council of the National Smoke Abatement Institution be requested to urge upon the Government the desirableness of appointing a Royal Commission for the purpose." While he advocated the proposals contained in the resolution, he found it difficult to suggest any course without the aid to be derived from favourable public opinion. Still, he considered the way in which fines were at present imposed rendered them inefficacious for their purpose, and he attributed the fact of fines being below the minimum laid down in the Act to the circumstance that magistrates were ready to accept the assurance of transgressors that the smoke nuisance charged against them would be remedied. Discretion properly used could not be complained of; if not properly used, then it was important that the law should be so amended as to render indulgence impossible.

Sir W. Siemens seconded the proposition, and the resolution was passed.

Votes of thanks to the Lord Mayor and to the Duke of Westminster, who had presided during the latter part of the meeting, brought the meeting to a close.

## EXPLORATIONS IN GREECE.

MR. W. G. STILLMAN, who has been American consul in Athens, in a letter dated from Cutigliano, referring to the proposed British school at Athens, writes as follows:—

Ancient Athens is the one luminous point from which we borrow light, more or less, for all that world of art and letters which lies still buried in the obscurity of the unhistorical past. From there we must take most of our measurements.

And of the work to be done there, and in which the British school may bear its honourable share, it is to the admirable French school that we must look for the example rather than to the more dazzling achievements at Olympia and Gutbakche. Few people away from Athens are aware of the mass of material, epigraphic and technical, which the French school has collected. But neither would this success have been attained had the investigations been limited to Greek territory, nor would any Government have gone to the continued expense the school causes from purely platonic devotion to archæology. The results accruing to the Louvre have been, I conceive, indispensable to the continuance of the school, and for these results the school is obliged to go to Turkish territory, with the consequence that we gather more knowledge of secondary points of Greek archæology from their labours than of the points of chief interest. Excavation is an indispensable part of the study of archæology, as anatomy of medicine. It is superfluous to say that it is equally so to the discovery of new material. But it is expensive and very uncertain in its returns, and likely to task more severely the liberality of Englishmen (in default of Government appropriations) than the ordinary expenses of the school. Such liberality is not likely to be excited under the present illiberal system of the Greek Government. While it is unquestionably true, as you say, that "the spirit of the time sets itself sternly against the sort of archæological pillage which found favour with former generations," it is to my mind (and I have some experience in the study of these matters) equally true that private contributions for archæological research are not likely to be largely forthcoming without quicker stimulus than the discovery of remote facts and the increase of Greek museums. There are probably many wealthy men who would give the means for specific undertakings, with the prospect that a part of the proceeds should, in gratification of a natural and worthy patriotic or personal pride, go to the British or local English museums as their contributions, but who would regard with a very platonic indifference projects whose only tangible result was to accumulate antiquities for the sheds of Olympia and Mykonos, or even for the Museum of Athens. My own experience encourages me to hope for very little private aid to research in Greece without a relaxation of the present laws and

regulations of the Hellenic Government. I venture to predict that without this the British school will, as the French does, find its chief field of study in Turkish territory. No one wants to rob Greece, and most students of archæology would be glad to see that system adopted which most encouraged discovery, no matter who profited materially. This is not the Greek way of looking at the matter, and the result is that, beyond their own very restricted means of excavation, little relatively is done openly and by scientific associations, and much is done (to the great loss of archæology) by secret and destructive digging by speculative operators. If the Greek Government and nation had, or were likely in the course of generations to have the means to do all, of even the most important, work to be done, nothing could be said of their exclusiveness; but as the case now stands, even with all their illiberality, the most important work is done (thanklessly at that) by foreigners, with results which very much diminish the prospects of future labours.

I believe that most students of archæology in Greece will agree with me that the chief impediment to the progress of discovery is in the jealousy and narrowness of spirit of the Greeks, and that if the Government were to adopt not the liberal Italian law, but even the Turkish, and reserve to itself the right to retain as its share of all proceeds of excavation the most important objects, and then abolish the control of that most narrow and jealous of all scientific bodies, the Archæological Society of Athens, throwing open the fields of research to all scientific organisations under proper restrictions, not only would the Greek museums profit enormously, but archæology would benefit to a still greater degree, and we should be able to rejoice over the preservation from destruction, not merely by time, but by ignorance and barbarism and the consequences of clandestine commerce, of numerous—nay, innumerable—data of the highest importance to archæology.

The Greek Government has now at its head a statesman of high practical intelligence, of unhesitating patriotism, and unflinching honesty, and who, if heartily supported, can carry any reasonable reforms. I know from personal communication that M. Tricoupi is in favour of a change of the archæological laws, but public opinion in Greece must be acted on to enable him to do anything. The Greeks are in general excessively shortsighted in their political views, but too intelligent not to see their best interests when clearly pointed out. If the establishment of a British school at Athens were the occasion of a friendly exposition of the relations of the Greeks to the researches into their own archæology, it might be an incalculable assistance to the school itself.

Although the number of valuable works of art found in Italy, and to be probably found, is incalculably greater than in Greece, the Italian Government puts no restriction on their exportation beyond the prior right to purchase those which it regards important for the Italian museums. There is thus every inducement to excavation, and none to that clandestine trade and mutilation by both of which Greek archæology suffers beyond estimate. In my own personal experience I have known some of the most valuable acquisitions to certain branches of archæology to have utterly disappeared, lost to the science, owing to the restrictive measures of the Government, measures which equally thwart and hamper all practical studies of the schools already in existence to a degree which people in England do not comprehend and probably would not accept. What a French school with official support can with difficulty tolerate would drive a British school under personal encouragements out of the field. The essential condition for the prosperity of a school of archæology in Greece does not exist, and by fault of the Greeks.

## POINTING OF RUBBLE WALLS.

A LETTER from Mr. J. H. Parker, C.B., has been addressed to the secretary of the Institute of Architects, in which he writes:—

Many of the architects of the Victorian Gothic style have adopted the plan of pointing the joints of rubble walls. This appears to me a great mistake and a foolish waste of money. Such walls were never intended to be pointed, and never were pointed in the time of the Mediæval Gothic architects of the Henrys and the Edwards. They were occasionally left visible, but rarely, and then only because there was not money enough at the moment to have them plastered and painted. Painting the interior of a church was always part of the original design, and the architect gave the design for the painting of the interior just as he did the design for the mouldings or other ornamental details. On the exterior these rubble walls were also plastered, but the surface was covered with rough-cast to keep out the wet. Many kinds of stone absorb so much moisture, if they are exposed to the wet, that the walls are nearly always damp, and this makes the interior of the church damp also. Pointing the joints between the rough stones of a rubble wall does not keep out the wet; it does no good either on the outside or inside. In the interior it almost prevents the wall being plastered over and a smooth surface made for painting upon, and the next generation will curse the ignorant people who have thus prevented them from having their churches painted.



My experience may lead those architects who adopt this vile practice to discontinue it. I am aware that my good friend the late Sir Gilbert Scott is said to have set the example of doing this; but I am sure that he never intended to do so, nor did it in the way ignorant imitators do. It was always his practice in restoring cathedrals or any fine old church to leave visible some parts of the old construction, in order to show what the real features of the building were before he began to restore it. In each of the nineteen cathedrals that were under his care as superintending architect at the time of his death, those who can understand such things can always find some portions of the original work left visible, but not conspicuous. His imitations were generally so well done that if he had not taken this precaution the next generation would not have been able to distinguish the new work from the old; but he always considered it the duty of the architect employed to restore a fine old church to make it a real restoration as far as possible, and not a new design with an old name. For this reason he always left visible a part of the old work, but not too conspicuous, lest it should have a bad appearance, for the general effect of the interior of the building is never to be lost sight of.

## REVIEWS.

**THE METROPOLITAN BUILDING ACTS, 1855 to 1882.** With Appendices. By W. CUNNINGHAM GLEN and J. R. CUNNINGHAM GLEN. Published by Shaw & Sons.

There seems to be a competition in publishing editions of the Metropolitan Building Acts, and under the circumstances of the case it is difficult to keep the editions from being alike in character, and no less difficult to decide which is entitled to precedence. What strikes us as characterising the edition by Messrs. Glen are the extent of the notes, which include recent cases, the circulars of the superintending architect of the Metropolitan Board, the copies of Acts which relate to the City, and the comprehensive index. The book is well printed, with margins that allow of notes.

**ESTIMATING A METHOD OF PRICING BUILDERS' QUANTITIES FOR COMPETITIVE WORK.** By a Practical Estimator. Published by B. T. Batsford.

The determination of prices in a builder's office is one of the "open secrets." They are supposed to be known only inside the office, and are jealously guarded; but somehow a shrewd guess as to what they are can be given by outsiders. The compiler of this book on estimating evidently being a man who has had experience, and knowing, we suppose, how important is this secrecy, does not give his name, but he enables everyone who has a few shillings to enter, as it were, into a builder's office and see how schedules are made out. "The bills of quantities I use," he says, "were supplied by a well-known London surveyor to estimate from, and the work was a villa residence at Hampstead; the estimate framed on the prices given was barely 2½ per cent. above the lowest." This extract indicates the character of the book. It is elementary, as the subject is only a London villa; but work of this class is better adapted for beginners. The "Practical Estimator" takes up the various items and explains how they are to be priced, the nature of the competition being always kept in view. The builder's profit is supposed to be 10 per cent. The novice will find a good many "wrinkles" in the book, but he will do well to test the prices before he makes them a standard, and for this purpose Mr. Batsford might find it an advantage to issue copies interleaved.

**HOSPITAL CONSTRUCTION AND MANAGEMENT.** By F. J. MOUAT, M.D., F.R.C.S., and H. SAXON SNELL, F.R.I.B.A. Part I. Published by J. & A. Churchill & Co.

The present age has its shortcomings, but much may be pardoned for the sake of the beneficent spirit which is exemplified in the attention given to the improvement of hospitals. Charity is no new invention, and in the worst times people were ready to help the sick; but hospitals of the kind which are now in almost every English town are a modern institution in England. Macaulay records the great difficulty of the Government in 1692 to provide shelter and attendance for the men who were wounded at La Hogue. There was not then, he says, in the whole realm a single infirmary supported by voluntary contributions. Even in the capital the only edifices open to the wounded were the two ancient hospitals of St. Thomas and St. Bartholomew, and seeing the need the Queen ordered the buildings at Greenwich to be completed. The York Hospital, which is one of the oldest, was not founded until 1710, Westminster dates from 1719, Cork from 1720, and Edinburgh from 1736. The example which was set up in England in the eighteenth century was imitated in most of the countries on the continent. But when those hospitals were erected, it was not believed that the planning of a building could have any influence in the recovery of the patients. The wards were simply large unventilated rooms, and there was everywhere in the buildings a primitive indifference to sanitary arrangements. Some wards were dignified with the title "convalescent;" they were generally placed in positions so as to be out of control, and in them elderly patients and children were at the mercy of the men

who most quickly gained the strength which enabled them to be brutal. It is not surprising that at least one patient in ten in the principal hospitals succumbed to bad nursing and bad air.

Philibert Delorme three centuries ago offered suggestions which, although somewhat indefinite, have been interpreted as foreshadowing a perfect hospital. It would be better, he says, for the architect to fail in his ornamentation, and in things intended for the gratification of the eye, but which bring no advantage to the life and health of man, than in the rules of nature, which tend to the convenience, use, and profit of the inhabitants. But experts have not yet agreed what those rules of nature are, and in consequence there are several systems of hospital construction. Dr. Mouat attaches much importance to the suggestions which have been offered by the Surgical Society of Paris. In laying out a site, an area of about sixty square yards should be, it is said, allowed for each patient; an hospital with from 200 to 250 sick can be made to fulfil good hygienic conditions; an increase of superficial area as well as of cubic space is required, and the building should be limited to two storeys. The buildings should be placed in a single or in parallel lines at intervals of from 80 to 100 mètres, so as to insure effective separation and external aeration. Those suggestions have been generally accepted, the chief exception being the new Hôtel Dieu in Paris and St. Thomas's Hospital. In the latter it arose, according to Dr. Mouat, "from a singular and not very intelligible misapplication of those principles." "It is difficult," he says, "to understand how those responsible for this latter structure could have considered its division into huge blocks, six storeys in height from the basement, connected by continuous closed corridors, and many of its internal arrangements equally defective, to be a correct representation of the pavilion principle."

Some of the best examples of that principle are described in the book on hospitals by Dr. Mouat and Mr. Snell, of which the first half has appeared. There is an advantage in the co-operation of an architect and a physician, for while one writer is able to describe the constructive details with accuracy, the other can suggest how far the buildings are adapted to the work of a hospital. The book will enable the reader to understand the latest development of the pavilion theory, and, what is of equal importance, the shortcomings that are found in many of the best efforts to embody that theory. For architects who have to gain experience in hospital construction the book will be a mine of information. The buildings which are described comprise English and foreign examples, viz., the Herbert Military Hospital, Blackburn Infirmary, Leeds Infirmary, St. Thomas's Hospital, Edinburgh Infirmary, Glasgow Western Infirmary, Norfolk and Norwich Hospital, Marylebone Infirmary, hospitals at Mons, Antwerp (which is surprisingly like Professor Marshall's circular hospital), Heidelberg, Berlin, Düsseldorf, Königsberg, Ehrenbreitstein, Dresden, and Strasburg. It will be seen from the list of subjects that Mr. Snell does not obtrude his own work on his readers, and in treating of the work of other architects he is never censorious or unfair. The Edinburgh and Glasgow examples receive the highest praise from Dr. Mouat.

**MEMORIALS OF CHRISTCHURCH, TWYNHAM, HANTS.** By the late MACKENZIE E. C. WALCOTT, B.D., F.S.A. Third edition, revised by B. Edmund Ferrey, F.S.A. Published by W. Tucker & Son, Christchurch.

The beautiful Augustinian church in Hampshire has found a multitude of admirers since Bournemouth became a fashionable resort. Christchurch is a noble building. In length it exceeds "any of the Welsh, Irish, or Scotch cathedrals, and in England those of Rochester, Ripon, Oxford, Bristol, Carlisle, and Manchester." Like so many other churches, it exemplifies the variations of English architecture. The late Mackenzie Walcott wrote an excellent guide to the church, which to him was attractive for other than archaeological reasons, and in a small compass he was able to give much interesting information without employing a sentence that was verbose. A new edition having been called for Mr. Ferrey undertook the revision of the guide. He has gone over the book line by line, and the new edition consequently will secure an amount of confidence that was hardly possible before, for Mr. Walcott was supposed to have some of the weaknesses of enthusiastic lay archaeologists. From the association of his father with Christchurch, and his own enthusiasm for English church architecture, Mr. Ferrey must know every stone and mortar-joint in the building. He has operated on the book as carefully as if he had been restoring a church. The text, as he says, has been tenderly dealt with, and what has been added is in smaller type or in foot-notes. The guide is now both trustworthy and interesting; it is in a convenient form, is well printed, and embellished with a clear photograph.

**The Death** is announced of Baron Heinrich Ferstel, of Vienna, an honorary and corresponding member of the Royal Institute of British Architects, Royal Gold Medallist. Baron Ferstel was born at Vienna in 1828, and adopted the profession of an architect, in which he gained high honours. He designed several public buildings in his native city, and among them the Votive Church and new University. He was a correspondent of the Académie de Belgique and the Institut de France, &c.



## LEGAL.

**Supreme Court of Judicature.—Court of Appeal.—July 14.**(Before the MASTER OF THE ROLLS and Lords Justices  
COLTON and BOWEN.)**PARKER v. THE FIRST AVENUE HOTEL COMPANY, LIMITED.**

This was an action by the plaintiff, who occupies, for the purposes of his business as a photographer, the upper part of No. 40 High Holborn, to restrain an interference with his ancient lights by the defendant company in the erection of their new hotel. At the trial of the action during the Michaelmas sittings, 1882, Mr. Justice North granted an injunction, but introduced qualifying words so as to leave the defendant company at liberty to put on a sloping roof on that portion of their building which was immediately opposite to the plaintiff's side windows looking to the west, so long as the angle of incidence to the centre part of the plaintiff's windows was not less than 45 degrees above the point of incidence. The company were also not prevented from raising the walls north and south of the proposed sloping roof so long as they did not thereby darken, injure, or obstruct the plaintiff's ancient windows. The plaintiff, who desired to get an absolute prohibition against any building by the company above a certain height, had brought the present appeal for the purpose of getting the qualifying words introduced into the order by Mr. Justice North removed.

Mr. Finlay, Q.C., and Mr. Colt appeared in support of the appeal by the plaintiff; Mr. H. Matthews, Q.C., and Mr. Beddall for the respondents, the defendant company.

Lord Justice Cotton, in delivering the judgment of the Court, said that the learned judge of the Court below seemed to assume that it was a conclusion of law or necessary inference of fact that no building at an angle of 45 degrees would constitute an interference with the access of light. This idea was, however, erroneous. There could be no such conclusion of law, as it was a question which must depend on the facts of each case. The notion seemed to have been adopted in consequence of some of the provisions of the Metropolitan Building Act, but, if it proceeded upon any theory that so long as light was obtained from an angle of 45 degrees there could be no ground of complaint, the sooner that idea was got rid of the better. The order must be varied by substituting words which would restrain any interference with or obstruction of the plaintiff's ancient lights by the buildings of the defendant company to the south or north of the part covered by a sloping roof, and immediately opposite the plaintiff's side windows facing west either above or conjointly with the sloping roof. The order would also restrain the defendants from allowing to remain any building erected since the hearing in the Court below. The defendant company must undertake not to contend, if any application should be made by plaintiff for a sequestration against them for non-compliance with this order, that the obstruction was caused solely by the sloping roof.

## ART WORKMANSHIP.

**Cork Exhibition Medal.**—The premium of 5*l.*, offered in competition to all Ireland, in connection with above, for the best design for prize medal, has been awarded by the executive committee to Mr. Richard Lane, of the Ann Street Ironworks, Belfast. The medal is designed in Celtic style, as being more national. On the obverse is a foliated trefoil, in the centre of which is placed the city of Cork shield of arms. The space above, and on each side of the shield, is filled in with intricate scroll tracery characteristic of the style; while the spandrels between the trefoil and the circular band running round it are filled with interlaced work in the form of reptiles, having the following inscription and date: "Cork Industrial Exhibition, MDCCCLXXXIII." On the reverse is an ancient Irish harp, with scroll ribbon thrown across and partly entwined, bearing the words "Awarded to." Surrounding this is a band left blank for exhibitor's name, &c.; while outside all is a space divided into panels by circular and square bosses alternately, three of each, ornamented in character with the style; the panels, six in number, being filled with strap fretwork to correspond, varied in treatment.

**Beaconsfield Memorial Window.**—The committee of the Scottish Conservative Club, Edinburgh, have chosen the design of Messrs. James Ballantine & Son for a window commemorative of the Earl of Beaconsfield, which, at a cost of 300*l.*, is to be placed in the principal staircase of the new buildings of the club in Princes Street. The window is in three compartments, of which that in the centre is twelve and the two others eight feet high. The large central design is a majestic female figure, wearing a crown, intended to illustrate the *Historic or Regal Empire of Britain*, and typical of the Conservative or Constitutional spirit of the party. Firmly held by the right hand is a governing sceptre; the other hand rests upon a sheathed sword; the national quarterings are displayed on the breast, and the rose, thistle, and shamrock are embroidered upon the robe. St. Stephen's and Westminster are seen in the background, and beneath is the

Roman motto, "Imperium et Libertas," adopted by the Earl of Beaconsfield as embodying the programme of his Ministry. The treatment of the whole design is that of the Italian Renaissance period, in accordance with the architecture of the building.

**Stained Glass, Lerwick Town Hall.**—Some stained glass windows have been just erected in the new Town Hall of Lerwick, in the Orkneys, by Messrs. Cox, Sons, Buckley & Co., of London. The windows are in the front of the great hall of the edifice. They are of two lights each, and the subjects represented in them are as follows: No. 1. In one light is the figure of King Harold Hardrada of Norway; in the other is that of Earl Magnus, to whom, under the title of St. Magnus, the cathedral of Kirkwall is dedicated. No. 2. In one light is King Olaf Tryggvison of Norway, the Christian civiliser of Norway and the North; in the other is Queen Thyri, also of Norway. Both these personages are mentioned in Longfellow's poems. No. 3. In this window are represented King Hakon Hakonson of Norway, and the Jarl Rögnbold, the Crusader. No. 4. Herein are the figures of King James III. of Scotland and of the Princess Margaret of Orkney. All these figures, besides armorial bearings in four windows, which are now in course of execution in the studio of the firm, are executed in the best style, and in rich old colours.

## TOWNS IMPROVEMENT.

**Finsbury Park Baths.**—These baths, which were opened last week, have been erected by Mr. P. J. McManus, Brook Green, Hammersmith, from drawings prepared by Mr. J. P. Bennett, architect. The engineering arrangements have been carried out by Messrs. Thos. Bradford & Co., of London, Manchester, and Liverpool, the heating of the two swimming baths, and the supply of all the hot water for the forty-one private baths, being worked from two high-pressure Cornish boilers fixed in the basement of the building. The gentlemen's swimming bath is 77 feet long by 28 feet wide, the ladies' swimming bath being 24 feet long by 8 feet 6 inches wide, and the engineers have arranged for heating them by injection of high-pressure steam from the boilers, and, judging from the result at the opening, it is both simple and effective; in fact, we understand that, when cold water and steam are turned on simultaneously, the plunge baths, when full, are warm enough for swimming purposes, the temperature registering 70° F. There is a total of forty-one private baths, made of porcelain, which are all supplied with hot and cold water, and each one is fitted with one of Bradford's patent bath-valves, so constructed that either hot or cold water can be turned on separately or any proportion of each, and by an ingenious arrangement outside the bath the attendant can see the temperature of the water going into the bath, and can regulate the same so as to flow into the bath at any given temperature from 60° to 180° F. The hot, cold, and waste services are all readily accessible, and, as may be imagined, are very extensive. We notice that there is no lack of hot water, for in the boiler-house one of Bradford & Co.'s water-heaters is in operation. The whole being worked by only two boilers will, we think, prove both an economical and effective engineering scheme. The towels and bathers' drawers used will be washed on the premises, a complete set of Bradford & Co.'s plant being used, the towels being boiled by steam in special troughs—a very cleanly and effective arrangement. The drying-closet is also heated by a powerful steam coil supplied from the boilers, the moisture being carried away by a powerful ventilating arrangement.

## CHURCH BUILDING AND RESTORATION.

**Halam.**—A bazaar has lately been held in aid of the funds for the restoration of Halam church, near Southwell. The church is an old building, and the chancel arch and tower are interesting specimens of Norman architecture. The tower is low and stunted—a special characteristic of Norman architecture. These are the only remains of the first church which was erected there. In the south wall of the nave three arches were inserted for an aisle which was to have been built, but the work was not carried out. In the restoration it is proposed to build it. The arches are of beautiful design, and have remained in their original perfection, built up inside the wall, since the thirteenth century. A vestry and organ chamber will also be added. The tower will be raised by battlements, and a conical roof will be introduced. It is estimated that the whole of this work will cost 1,495*l.* The architect for the work is Mr. Ewan Christian.

**Starcross.**—The memorial-stone of a chapel at the Western Counties' Idiot Asylum, Starcross, Exeter, has been laid. The chapel will be situated at the rear of the building, and be approached through the present dining-hall. The basement of the new building, of which the chapel will form the principal portion, consists of a newly-erected workshop, which will be devoted to mat-making, brush-making, and tailoring. The latter trade, as well as shoe-making, is already carried on. The new structure



will be 50 feet in length by 18 feet 6 inches wide, and the workshop will be 9 feet in height. Between it and the chapel there will be a solid ceiling of concrete, so as to deaden all sound. The chapel itself will be 19 feet in height, and externally it will be of a plain Gothic type, in harmony with the adjoining buildings. The outer walls will be of limestone, with Beer stone dressings. Messrs. J. W. Rowell & Co., of Newton Abbot, are the architects; Messrs. Stacey, also of Newton Abbot, are the builders. The amount of the contract is 750*l*. The new chapel will accommodate 100 persons.

**Cheadle Hulme.**—The memorial-stone of a Wesleyan chapel and Sunday-school at Cheadle Hulme have been laid. The chapel is being erected within a short distance of the old building, from the designs of Mr. J. S. Whittington, architect, Manchester, the contractor being Mr. J. Whitley, of Blackley. It is to provide accommodation for more than 300 persons. The school will be immediately behind the chapel, and is arranged for 200 children.

**Richmond.**—The foundation-stone of a Congregational church at Richmond, Yorkshire, has been laid. The new buildings are to be erected on a site given by the Earl of Zetland. A school and class-room will be erected adjoining the church. The architects, Messrs. Clark & Moscrop, of Darlington, have adopted an Early Perpendicular style of architecture in keeping with the beautiful traceried fifteenth and sixteenth century work at St. Mary's Church, and the tower of Grey Friars adjoining the site. An octagonal tower, with long traceried belfry windows, embattled parapet, and lofty slated spire rising from the south-west corner, will form a conspicuous object in the district.

**Huddersfield.**—The foundation-stone of a new chancel, which is to be added to the church of St. Paul, has been laid. Besides the erection of a chancel, it is also intended to effect considerable alterations and additions to the interior of the church, which for some time past has been ill adapted for devotional services. The church, which was built about fifty years ago, is in the Early English style of architecture, and consists of nave and chancel, and has a tower in the centre of the west end. The old chancel was, however, very limited in area. The exterior work has been designed in keeping with the old building; the interior work is of a more decorative character. The contracts have been let to the following firms: Mason's work, Messrs. B. Graham & Nephew; joiner's work, Mr. J. Christie; plumber's work, Messrs. Brook & North; plasterer's work, Mr. W. E. Jowitt; slater's work, Messrs. W. Goodwin & Sons; painter's work, Mr. Sam Kendall; and the warming apparatus will be supplied by Messrs. W. and S. Thornton & Son, all of Huddersfield. It is estimated that the total cost will reach 4,500*l*. Messrs. John Kirk & Sons, of Huddersfield and Dewsbury, are the architects.

**Bacup.**—The Church of St. John the Evangelist, built on the site of the old church, which was pulled down, has been opened. The new church has been built of the best and most durable stone procurable. The site being irregular and sloping has influenced the design of the building to some extent. The church accommodates between 800 and 900 adults, and consists of a nave, chancel, north and south nave aisles, north chancel aisle, and a western narthex and baptistery. The tower, a portion only of which is at present built, is placed at the highest part of the site, on the south-west corner of the building. The ground, falling rapidly from west to east, has afforded space for a crypt or basement storey below the chancel, which is used as parish room and vestries. The nave floor line, following many ancient precedents on similar sites, also slopes down towards the chancel step. The nave, chancel, and narthex are of the same width, forming a parallelogram about 120 feet in length, and 27 feet broad. The walls internally are almost entirely faced with dressed ashlar stone. The roofs are open-timbered, boarded, and felted, of the kind known as "hammer-beam," that in the chancel being more ornate than the nave. The nave is about 67 feet long, and is divided from the aisles by arcades of four bays. The contractors for the masonry are Messrs. James Hargreaves & Co. The woodwork is done by Mr. J. Plane, and the slating by Mr. J. Rushton. The plumber is Mr. Robert Clegg, for whom Messrs. Edmondson & Co. have executed the glazing. The architects are Messrs. Medland & Henry Taylor, of Manchester.

### SCHOOL BUILDINGS.

**Derby.**—The memorial-stones of buildings for the accommodation of Sunday and day scholars have been laid. The total cost of the building will be about 2,700*l*., including cost of land, furnishing, &c. There will be four large class-rooms on the ground floor, and a large room on the second storey, and the new building will afford accommodation for 700 children. The architect is Mr. F. C. Coulthurst, and the builder Mr. Hewitt, both of Derby.

**Hastings.**—The new buildings for the Hastings Grammar School have been opened. Owing to want of funds the whole of the intended scheme has not yet been carried out. The section of the work now completed contains the large school-room, with

raised platform at one end and a gallery at the other, for the distribution of prizes and other ceremonies that may take place. Adjoining this room are the class-rooms, four in number. Above the large rooms is space for twenty cubicles, which will not, however, be fitted up for use until the completion of the second section. The space beneath the large room, arising from the slope of the ground, is made use of for a covered playground. Section No. 2 will comprise the master's residence and accommodation for thirty boarders, consisting of dining-hall, dormitories, &c. The buildings have been erected by Messrs. Howell & Son, of Hastings, under the superintendence and from the designs of Messrs. Jeffery & Skiller, architects, also of Hastings, the materials used being Kentish rag with Bath stone dressings. The heating of the large rooms and corridors is effected by hot air on the principle by Messrs. Grundy, and that of the class-rooms by Boyd's hygienic ventilating school grates; there are also ample means for introducing fresh cold air into the buildings. The estimated cost of the entire scheme when completed is 10,000*l*., of which amount somewhat over 5,000*l*. has been expended on the present part with its approaches.

**Halifax.**—The foundation-stone of a new Primitive Methodist Sunday-school has been laid at Halifax. The school is being built from designs by Messrs. George Buckley & Son, of Halifax, and will be a Gothic structure. The cost will be about 4,000*l*., but this sum includes the purchase of land and buildings.

### GENERAL.

**The City of Manchester Art Gallery** exhibition of works of modern artists will be opened on Tuesday, September 4, and will remain open until December 11.

**The Corporation of Liverpool** autumn exhibition of modern pictures in oil and water-colours will open in the Walker Art Gallery on Monday, September 3. The dates for receiving pictures are from August 1 to 11, both inclusive.

**A Sculptor**, named William Francis, while engaged on Saturday in putting up a statue at the side of the Roman Catholic Cathedral, Limerick, accidentally missed his footing and fell from a height of 100 feet. He was killed instantly.

**Strawberry Hill.**—Messrs. Ventom, Bull & Cooper have disposed of this estate to Baron H. de Stern, who has purchased it for occupation, so that the house, fortunately, will be preserved.

**The Beckford Library Sale** of twelve continuous days was brought to a close on Saturday by Messrs. Sotheby, Wilkinson & Hodge. The total of the twelve days' sale amounted to 12,852*l*., which brings the grand total up to the large figure of 65,705*l*. 8*s*. 6*d*. The remaining portion of the library will be brought forward some time towards the end of the present year.

**Sir Frederick Leighton, P.R.A.**, has resigned the command of the Artists' Corps of Volunteers, which he has so long, zealously, and honourably held. He is succeeded by Major Edis.

**The Canterbury Local Tait Memorial Committee** have decided to adopt the plans of Mr. Scott, and to place four sedilia on either side of the cathedral altar, with a canopied sedile for the Archbishop. Canopies for the eight sedilia were strongly advocated, but it was deemed prudent to leave that question to the architect, as well as the further question whether the memorial should be in oak or stone.

**The Memorial-stone** of the new Museum and Art Gallery in Queen's Park, Manchester, was laid on Saturday by the Mayor. The cost of the building, which is to have a floor space of over 12,000 feet, will be about 6,500*l*. The building has been designed by Mr. J. Allison, the city surveyor, and will be Gothic in style.

**Statues for the Sanctuary** of Ratcliff College Chapel, Leicester, were unveiled last week, the whole having been presented by "old boys" of the college. This completes the work designed by Messrs. Pugin & Pugin. The statues are the work of Mr. Roddis, of Birmingham.

**An Excellent Work** by Mr. Hamo Thornycroft, A.R.A., in this year's Academy exhibition, is a bronze bust of Mr. John Belcher, jun., the architect. It is a faithful likeness, and the daily and weekly press have extolled it as a fine example of the eminent sculptor's method.

**The Meeting** of the proprietors of Drury Lane Theatre was held on Saturday. The chairman stated that the architect of the Metropolitan Board had expressed his satisfaction as to the manner in which the alterations had been executed, and, from his own observations, he could, without fear of contradiction, assert that Drury Lane Theatre was better provided with exits in case of alarm or panic than any theatre he had ever visited.

**Messrs. W. & J. Burrow** have removed their offices from 3 Mark Lane Square to Corn Exchange Buildings, 15 Seething Lane.

**The Municipality of Paris** have entered into a contract with Messrs. Stuart & Co., Edinburgh, to lay with granolithic the pavement in front of the Mairie of the Fourth Arrondissement, Rue de Rivoli. Messrs. Stuart & Co. have also contracted to pave in the same manner a space some 150 yards long in the city of Cologne.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, JULY 21, 1883.

### COMPETITIONS OPEN.

**BELFAST.**—Aug. 1.—Designs are invited for proposed Public Library. Premiums of £100, £50, and £25. Mr. Samuel Block, Town Clerk, Town Hall, Belfast.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**BURNLEY.**—July 31.—Designs are invited for the Erection of a Hospital. Premiums of £100, £30, and £20. Mr. Joshua Rawlinson, Hon. Secretary, Burnley and District Hospital, Burnley.

**NEWCASTLE-ON-TYNE.**—July 30.—Designs are invited for a Hospital for Infectious Diseases to be built on a Site near Heaton Junction. Subject to certain conditions, the successful Architect will have the carrying out of the work, and a premium of 50% will be divided between the second and third competitors. Mr. Hill Motum, Town Clerk, Town Hall, Newcastle-on-Tyne.

**STAINES.**—July 21.—Sketch-plans are required for a Hospital for Infectious Diseases. Mr. John Anthony Engall, Clerk to the Staines Joint Hospital Board, Staines.

### CONTRACTS OPEN.

**ABBAY TOWN.**—July 30.—For Building Dwelling-house, &c. Mr. John Cullens, Highlows, near Abbey Town, Holme Cultram.

**ABERDEEN.**—Aug. 8.—For Addition to Library, King's College. H.M. Office of Works, Whitehall Place, S.W.

**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

**AUDENSHAW.**—July 21.—For Four Class-rooms. The Vicar, Audenshaw.

**BARROW-IN-FURNESS.**—July 30.—For Building Hospital. Messrs. Payle & Austin, Architects, Barrow.

**BELFAST.**—Aug. 6.—For Building Post-office. The District Engineer, Post-office, Belfast.

**BELFAST.**—For Additions and Alterations to Presbyterian Church, Hillsborough. Mr. William Batt, jun., 4 Wellington Place, Belfast.

**BIRMINGHAM.**—July 21.—For Building Liberal Club. Mr. J. A. Cossins, Architect, Warwick Chambers, Corporation Street, Birmingham.

**BIRMINGHAM.**—July 28.—For Alterations and Additions and Boundary Wall to Workhouse. Mr. W. H. Ward, Architect, Paradise Street, Birmingham.

**BO'NESS.**—July 27.—For Building Public School. Mr. W. Simpson, Architect, 61 King Street, Stirling.

**BOOTLE.**—July 28.—For Building Club House. Mr. D. Lyon, Architect, Leith Offices, Moorfields, Liverpool.

**BRIGHTON.**—For Completion of Transepts and Side Chapels, St. Joseph's Church. Mr. J. S. Hansom, Architect, 27 Alfred Place West, South Kensington.

**BRISTOL.**—Aug. 1.—For Erection of Manufactory and other Buildings. Mr. H. C. M. Hirst, 30 Broad Street, Bristol.

**BROWNHILLS.**—July 26.—For Building Infants' School. Mr. T. H. Fleming, Architect, Waterloo Road, Wolverhampton.

**BURNLEY.**—For Building Bakery, Stables, Store-rooms, &c. Mr. C. Parsons, Architect, 9 Grimshawe Street, Burnley.

**CARLTON COLVILLE.**—July 26.—For Building Church. Mr. George Glover, Architect, Lowestoft.

**CATERHAM.**—For Building Small School. Rev. F. J. Roe, Catholic Church, Caterham.

**CHERTENHAM.**—July 23.—For Construction of Water-works. Mr. J. F. Bateman, 16 Great George Street, Westminster.

**CLECKHEATON.**—July 25.—For Adding Storey to Warehouse. Mr. F. W. Helliwell, Architect, Brighouse.

**COLWYN BAY.**—July 26.—For Construction of Sea-wall, Breakwater, &c. Mr. L. Booth, Architect, 89 King Street, Manchester.

**CORK.**—July 23.—For an Addition to School of Art. Messrs. H. & A. Hill, Architects, 22 George's Street, Cork.

**DUNDEE.**—July 23.—For Building Goods Shed, Store, Offices, Boiler, Engine, and Weigh-houses, &c. Mr. Barr, Resident Engineer, Northern Division, Caledonian Railway, Perth.

**DUNGANNON.**—Aug. 15.—For Building Sunday School and Parochial Hall. Rev. Lewis Richards, Dungannon.

**EARLSDON, COVENTRY.**—July 27.—For School and Offices thereto. Mr. William Tomlinson, Architect, Coventry.

**ECCELSHALL.**—July 23.—For Building Brick Bridge at Cold Meece. Mr. R. Griffiths, County Surveyor, Stafford.

**ETON.**—July 25.—For Building Hospital. Plans, &c., at the Local Board Office, High Street, Eton.

**EXETER.**—August.—For Building Asylum to Accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect, 14 Furnival's Inn, E.C.

**FEATHERSTONE.**—July 23.—For Erection of Two Schools, School-house, supplying Flags and Kerb-stones, Sanitary Tubes and Pipes, making Causeways, Drains, &c. Mr. Robert Brown, West View, South Featherstone, near Pontefract.

**HERNE.**—July 25.—For Additions to Workhouse. Mr. Benjamin Adkins, Architect, Faversham.

**KIRKSTALL.**—July 27.—For Building Weaving Shed, &c. Mr. J. P. Kay, Architect, 30 Park Square, Leeds.

**LEAMINGTON.**—July 23.—For Building Two Schools for 300 Girls and 400 Infants. Mr. C. I. Blaker, 5 Church Street, Leamington.

**LINTON.**—July 25.—For Building Schools at Linton and Castle Gresley. Mr. John Marsh, Cauldwell, Burton-on-Trent.

**LIVERPOOL.**—July 23.—For Building Thirteen Blocks of Five-storey Artizans' Dwellings. Mr. J. D. Fisher, City Engineer's Office, Liverpool, W.

**LONDON.**—July 23.—For Surrey Gardens Mission Room. Messrs. Romaine-Walker & Tanner, Architects, 19 Buckingham Street, Adelphi, W.C.

**LOWER SYDENHAM.**—July 23.—For Building Thirteen Villas. Mr. W. D. Bullis, 21 Pinsbury Pavement, E.C.

**MAIDSTONE.**—For Building Chapel to Union. Mr. Henry A. Cheers, Bagshot, Surrey.

**MIDDLESBROUGH.**—July 28.—For Construction of Public Baths, including large Swimming Bath. The Borough Surveyor, Lower Commercial Street, Middlesbrough.

**NEWTON.**—For Building Chapel and School. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

**NEWTON HEATH.**—For Superstructure of St. Mark's Church. Messrs. Tate & Popplewell, Architects, 87 Morley Street, Manchester.

**OVER DARWEN.**—July 26.—For Building Church and School. Messrs. Pugin & Pugin, Architects, 111 Victoria Street, Westminster, S.W.

**SLATTEWAITE.**—July 23.—For the Erection of a Police Station. Mr. J. Vickers-Edwards, West Riding Surveyor, Wakefield.

**ST. HELENS.**—July 24.—For Alterations to Congregational Chapel. Messrs. Picton, Chambers & Bradley, Architects, 11 Dale Street, Liverpool.

**TONGWYNLAIS.**—July 21.—For Enlarging, &c., Baptist Chapel. Rev. J. Thomas, Tongwynlais.

**WREXHAM.**—July 23.—For Building Sunday School. Mr. John Morrison, Architect, 9 High Street, Wrexham.

**YALDING.**—For Building Vicarage House and Offices. Mr. John M. Hooker, Sevenoaks.

**YORK.**—July 29.—For Building Post Office. H.M. Office of Works, Albion Place, Leeds.

### TENDERS.

#### ABERAVON.

For Construction of Drainage Works, Aberavon. Mr. H. F. CLARKE, Briton Ferry, Engineer.

Griffiths, Gloucester	£1,300	0	0
I. & S. Rees, Aberavon	1,150	0	0
John, Briton Ferry	856	0	0
Durke, Briton Ferry	829	0	0
Davies, Neath	775	0	0
George, Briton Ferry	754	16	0
GREGORY, Aberavon (accepted)	695	18	8
Engineer's estimate	752	0	0

#### ASHTON-UNDER-LYNE.

For Painting and Decorating the Trafalgar Square Chapel, Ashton-under-Lyne. Mr. J. H. BURTON, Architect, Warrington Street, Ashton-under-Lyne.

STONEHAM (accepted).

Ten tenders were received.

#### BULWELL.

For Building Two Pairs of Villas at Bulwell. Mr. G. M. JAY, Architect, Hyson Green, Nottingham. Quantities by the Architect.

For Mr. Alfred Widdowson.

CARTIN (accepted) £705 0 0

For Mr. Thomas Tyer.

CARTIN (accepted) 495 0 0

#### BRIGHTON.

For Esplanade Improvements, &c., Brighton. Mr. P. O. LOCKWOOD, Borough Surveyor.

Marshall	£7,893	0	0
Parsey	7,495	0	0
Beadle Bros.	7,405	0	0
Chappell	6,896	0	0
Ancombe	6,439	0	0
Harrison	6,110	0	0
Cheesman	5,980	0	0
LONGLEY (accepted)	5,688	0	0
Oliver	5,600	0	0

For Walling, Additional Store-rooms, &c., Borough Hospital Boundary, Brighton.

Marshall	£1,293	0	0
Cheesman	1,125	0	0
Barnes	1,230	0	0
Longley	1,169	0	0
ANScombe (accepted)	1,105	0	0
Oliver	1,060	0	0

#### BEDFORDSHIRE.

For New Wing to Amptill House, Amptill. Messrs. USHER & ANTHONY, Architects, Bedford.

SPENCER (accepted).

For Alterations to Farmhouse at Biddenham. Messrs. USHER & ANTHONY, Architects, Bedford.

FOSTER (accepted).

For New Business Premises, Cauldwell Street, Bedford, for Mr. Peter Smith. Messrs. USHER & ANTHONY, Architects, Bedford.

FOSTER (accepted).

For Various Works in Converting Premises, High Street, Bedford, into Offices, for Messrs. Stafford & Rogers, Auctioneers. Messrs. USHER & ANTHONY, Architects, Bedford.

FOSTER (accepted).

#### CASTLE DOUGLAS.

For Erection of Dwelling-house, Castle Douglas. Mr. B. B. IMRIE, Architect, Springfield, Castle Douglas.

McEwen, Kirkcudbright	£370	10	0
HOWARD, Castle Douglas (accepted)	341	12	6

#### CLYDACH.

For Extensions and Alterations to Girls and Infants' School, Clydach, for the Rhwydywlydach School Board.

Jones & Hill £467 14 0



**CHESTERTON.**

For Alterations and Additions to House, Church Street, Chesterton.	
Bell & Sons, Cambridge . . . . .	£729 0 0
Charter & Williams, Chesterton . . . . .	696 0 0
Reading & Son, Cambridge . . . . .	680 0 0
Mills, Chesterton . . . . .	647 13 8
Thoday & Son . . . . .	637 0 0
PAMPHILON BROS., Cambridge (accepted) . . . . .	604 11 1

**COVENTRY.**

For Erection of Shedding, &c., for the Warwickshire Agricultural Society, Coventry. Mr. F. H. MOORE, Architect.	
Gloucester Waggon Company.	
SHARP & HISCOX, Leicester (accepted), according to a schedule of prices.	

**CUPAR, FIFE.**

For Additions and Alterations to Lordscairnis Farmhouse, Crawford Priory Estate, Cupar, Fife. Messrs. WM. LITTLE & SON, Architects.	
Black, Cupar, mason.	
J. & G. Maxwell, Auchtermuchty, joiner.	
McLeish, Cupar, plumber.	
Batchellor, Cupar, slater.	
Bryson, Cupar, plasterer.	
Total cost, £328 9s.	

**DEVONPORT.**

For Construction of Intercepting Sewer, Devonport. Mr. JOHN F. BURNS, Borough Surveyor, Engineer.	
Shaddock . . . . .	£1,339 0 0
Martin & Son . . . . .	1,037 0 0
Harley . . . . .	984 0 0
THACKER (accepted) . . . . .	799 0 0
Surveyor's estimate . . . . .	1,008 0 0

**DEWSBURY.**

For Extension of Aldam's Road, including River and Boundary Walling, Sewering, Faving, Flagging, Kerbing, Levelling, &c., Dewsbury. Mr. R. J. DUFF, Borough Surveyor.	
Whitehead, Ravenshorpe . . . . .	£2,154 0 0
Brier & Wilson, Dewsbury . . . . .	2,057 0 0
Small & Son, Dewsbury . . . . .	2,049 0 0
Firth, Dewsbury . . . . .	2,044 0 0
Turner, Dewsbury . . . . .	1,984 0 0
Oldfield, Dewsbury . . . . .	1,973 0 0
J. & T. Audsley, Earlsheaton . . . . .	1,949 0 0
Kitson, Batley Carr . . . . .	1,743 0 0

**EPSOM.**

For Works of Drainage and Laying Down Pipes on parts of Epsom Court Farm and Epsom Common, &c. Mr. J. R. HARDING, Surveyor.	
Armstrong, Chiswick . . . . .	£2,800 0 0
Poole, Wimbledon . . . . .	2,500 0 0
Catley, Pentonville . . . . .	2,497 0 0
Smith, Newcastle . . . . .	2,481 16 4
Standing, jun., Chiswick . . . . .	2,425 0 0
Gould, Monmouth . . . . .	2,425 0 0
Streeter, Croydon . . . . .	2,265 16 6
Pound, Bow Road . . . . .	2,251 5 0
Webb, Ewell . . . . .	2,249 0 0
Beadle Bros., Erith . . . . .	2,090 0 0
Young, Southampton . . . . .	2,012 13 2
Woodham & Fry, Greenwich . . . . .	1,939 0 0
CARTER, Anerley (accepted) . . . . .	1,806 2 6

**GREEN WICH.**

For Rebuilding the King William the Fourth Public-house and Two Shops adjoining Trafalgar Road, East Greenwich, for Mr. G. Burney. Mr. HENRY ROBERTS, Architect and Surveyor, 113 Lewisham Road, S.E.	
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*Accepted Tenders.*

Bright & Co., brickwork (scaffolding and labour only). Smith, Deptford, stonework.	
Garrett & Son, Greenwich, plastering (labour only).	
Featherstone, Deptford, plumbing, hot and cold water and gas fittings, &c.	
Cracknell, Rotherhithe, slazing and graining.	
Macpherson, Deptford, pewtering.	

For Erecting S x Nine-roomed Houses in Old Woolwich Road, East Greenwich, for Mr. G. Burney. Mr. HENRY ROBERTS, Architect and Surveyor, 113 Lewisham Road, S.E.	
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*Accepted Tenders.*

Hulet, Deptford, brickwork (labour only). Smith, Deptford, stonework.	
Garrett & Son, Greenwich, plastering.	
Featherstone, Deptford, ironwork and plumbing, &c.	
Cracknell, Rotherhithe, glazing.	

For Erecting the Miller Memorial Hospital, Greenwich. Messrs. YOUNG & HALL, Architects. Quantities by Mr. Morgan H. Young.	
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Dove Bros. . . . .	£4,375 0 0
Brass . . . . .	4,284 0 0
Hall, Beddell & Co. . . . .	4,247 0 0
Kirk & Randall . . . . .	4,090 0 0
Tongue . . . . .	4,084 0 0
Jerrard . . . . .	4,074 0 0
Green . . . . .	3,988 0 0
A. & F. Smith . . . . .	3,970 0 0
Hall . . . . .	3,860 0 0
HOLLOWAY (accepted) . . . . .	3,760 0 0

**HEYBRIDGE.**

For Building Four Dwelling-houses, Hall Road, Heybridge. Mr. H. P. C. B. CHRISTIE, Architect.	
Dines & Son, Malvin . . . . .	£522 0 0
Radmin, Tolleshunt D'Arcy . . . . .	486 15 0
Cockett, Maldon . . . . .	478 0 0
L. & G. Smith, Maldon . . . . .	440 0 0
Wilding, Heybridge (accepted) . . . . .	364 10 0
Coult, Great Totham . . . . .	349 10 0

**GORLESTON.**

For Board Schools, Gorleston, Great Yarmouth. Messrs. BOTTLE & OLLEY, Architects, Great Yarmouth.	
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*Whole Tenders.*

Blyth, Foulsham . . . . .	£4,950 0 0
Everett, Colchester . . . . .	4,275 0 0

*Contract No. 1.*

(Comprising Excavator's, Bricklayer's, Plasterer's, Mason's, and Slater's work.)	
Leggett, Yarmouth . . . . .	£2,975 0 0
E. Howes, Yarmouth . . . . .	2,830 0 0
T. Howes, Yarmouth . . . . .	2,789 0 0
CORK & BECH, Yarmouth (accepted) . . . . .	2,711 0 0
Bray, Yarmouth . . . . .	2,460 0 0

*Contract No. 2.*

(Comprising Carpenter's, Joiner's, Plumber's, Glazier's, Painter's, and Gasfitter's work.)	
Davy . . . . .	£1,803 0 0
Want . . . . .	1,685 0 0
Harbert . . . . .	1,649 0 0
Harby . . . . .	1,647 0 0
SPRINGALL (accepted) . . . . .	1,637 0 0
Cooper (withd-rawn) . . . . .	1,621 0 0

**HANLEY.**

For Erection of Greenhouse for Mr. W. Tunnick, Hanley. Mr. G. W. BRADFORD, Architect, Hanley.	
Gallimore, Newcastle . . . . .	£109 0 0
Ellis, Hanley . . . . .	104 0 0
Clark, Hanley* . . . . .	80 0 0

\* Accepted subject to reductions.

**HOVE.**

For New Buildings at the West Depot, for the Hove Commissioners. Mr. ELLICE-CLARK, Engineer.	
Humphrey & Son . . . . .	£1,287 2 0
Oliver . . . . .	1,073 0 0
Harrison . . . . .	990 0 0
Anscombe . . . . .	970 0 0
Stenning . . . . .	968 0 0
Cheesman & Co. . . . .	960 0 0
PARSONS & SONS (accepted) . . . . .	950 0 0
R. & F. Parsons . . . . .	894 10 0
Marshall . . . . .	800 0 0
Engineer's estimate . . . . .	1,000 0 0

For Making-up Norton Road for the Hove Commissioners. Mr. ELLICE-CLARK, Engineer.	
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Etheridge . . . . .	£590 0 0
Harrison . . . . .	542 0 0
Oliver . . . . .	522 0 0
Parsons & Sons . . . . .	498 10 0
LONGLEY (accepted) . . . . .	494 0 0
Engineer's estimate . . . . .	545 0 0

**INELLAN.**

For Police-station and Lock-up, Inellan. Phillips, Dunoon . . . . .	£399 0 0
IRVINE, Inellan (accepted) . . . . .	363 10 0
Whitehead, Dunoon (exclusive of gas or boundary walls) . . . . .	342 7 6
Christison & Scott (exclusive of gas and water) . . . . .	342 7 6

**KIRKCALDY.**

For New Farmhouse, Bogilly Raith Estate. Mr. ROBT. LITTLE, Architect.	
Bonthron, mason.	
Little & Son, joiner.	
McConnochie, plumber.	
Muir, slater.	
Scott, plasterer.	
Total cost, £1,000.	

**LONDON.**

For Taking Down the Old Yorkshire, Philip Lane, and Rebuilding same and Warehouses. Mr. J. T. SMITH, Architect.	
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		Extra for Sub-basement.
Higgs & Hill . . . . .	£8,632 0 0	£500 0 0
Holloway Bros. . . . .	8,030 0 0	475 0 0
Stephens & Bastow . . . . .	8,000 0 0	420 0 0
Nobbs . . . . .	7,701 0 0	400 0 0
Adamson & Son . . . . .	7,635 0 0	415 0 0
Brass . . . . .	7,343 0 0	387 0 0

For Road-making for the Vestry of St. Mary, Islington. Mr. C. HIGGINS, Surveyor.	
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	Grenville Road.	Huddleston Road.
Bell . . . . .	£400 0 0	£1,109 0 0
Heard . . . . .	359 0 0	979 0 0
Taylor . . . . .	350 0 0	875 0 0
Jackson & Son . . . . .	329 0 0	999 0 0
Pizzey . . . . .	325 0 0	955 0 0
Irons . . . . .	290 12 6	909 14 6
WALKER (accepted) . . . . .	263 9 0	949 0 0
Williamson . . . . .	249 10 0	1,198 0 0
KILLINGBACK (accepted) . . . . .	—	657 0 0
Surveyor's estimate . . . . .	320 12 6	1,034 7 10

For the Superstructure of Warehouses, Nos. 3, 4, 6, and 7 Dowgate Hill, E.C., for Mr. F. E. Warbury. Messrs. N. S. JOSEPH & PEARSON, Architects. Quantities supplied by Mr. T. Thornton Green.	
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Dove Bros. . . . .	£7,490 0 0
Scrivenor . . . . .	7,297 0 0
Brass . . . . .	7,277 0 0
Rider & Son . . . . .	7,270 0 0
Hall, Beddell & Co. . . . .	7,200 0 0
Patman & Fotheringham . . . . .	7,185 0 0
Pritchard . . . . .	7,149 0 0
Bangs . . . . .	7,120 0 0
Ashby Bros. . . . .	7,050 0 0
Mowlem & Co. . . . .	7,032 0 0
Williams & Son . . . . .	6,937 0 0
Patrick & Son . . . . .	6,935 0 0
Kilby & Gayford . . . . .	6,867 0 0
Corder . . . . .	6,786 0 0
Grover . . . . .	6,583 0 0

**LONDON—continued.**

For Enlargement of Chapel, House of Retreat, Lloyd Square, Clerkenwell. Mr. E. NEWTON, Architect. Quantities by Messrs. Palmer & Rnault. BANGS & CO. (accepted).	
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For Alterations and Additions to the Polytechnic Young Men's Christian Association, Regent Street, for Mr. Quinton Hogg. Mr. SPENCER CHADWICK, Architect.	
LANGMEAD & WAY (accepted) . . . . .	£2,050 0 0

For Alterations and Additions to Premises, High Street, South Norwood. Mr. R. RIDGE, Architect.	
Smith & Son . . . . .	£233 0 0
Wyatt . . . . .	307 0 0
Bryan . . . . .	292 0 0
Bowyer . . . . .	283 0 0

For Alterations and Additions to the Berwick Arms, Berners Street, W., for Messrs. Combe & Co. Mr. B. ELSON, Architect.	
Devereux . . . . .	£1,500 0 0
Foxley . . . . .	1,435 0 0
Craske . . . . .	1,397 0 0
Williams . . . . .	1,385 0 0
LANGMEAD & WAY (accepted) . . . . .	1,243 0 0
Puze & Lumley . . . . .	1,025 0 0

For the Erection of Additional Stabling, &c., for Messrs. Carter, Paterson & Co., at Church Street, Stoke Newington, under the superintendence of Mr. WILLIAM EVE, 10 Union Court, Old Broad Street, E.C.	
Hubble & Trott . . . . .	£3,275 0 0
Downs . . . . .	2,924 0 0
Lawrance . . . . .	2,775 0 0
Higgs . . . . .	2,700 0 0
Harris & Wardrop . . . . .	2,494 0 0
BROWN (accepted) . . . . .	2,385 0 0

For Alterations to Almond's Hotel, Clifford Street, W., for Mr. J. R. ROY. Mr. J. T. WIMPERIS, Architect.	
Howell & Sons . . . . .	£7,390 0 0
Perry & Co. . . . .	6,949 0 0
Lea . . . . .	6,909 0 0
Bird . . . . .	6,891 0 0
Morter . . . . .	6,846 0 0
Langmead & Way . . . . .	6,795 0 0
Vernal & Griffiths . . . . .	6,625 0 0
Brass . . . . .	6,674 0 0
Boyce . . . . .	6,553 0 0
Patrick . . . . .	6,500 0 0
Scrivenor . . . . .	6,465 0 0
Bywaters . . . . .	6,457 0 0
Fish, Prestige & Co. . . . .	6,340 0 0

**MONTROSE.**

For Repairing Borrowfield Road, from Victoria Bridge to Dublin Station. Mr. J. ANDERSON, A.M.I.C.E.	
Scott, Arbroath . . . . .	£1,100 0 0
Steedman, Dundee . . . . .	265 12 0
Young, Montrose . . . . .	259 0 0
Bruce, Brechin . . . . .	252 5 0
Lawson, Dundee . . . . .	250 0 0
Howie, Dundee . . . . .	237 13 9

No tender accepted.

**MORLEY.**

For Building large Wesleyan Sunday Schools, Morley. Mr. WALTER HANSTOCK, Architect. Quantities by the Architect.	
Goodall, Batley, mason . . . . .	£1,642 9 2
Wilkinson & Dawson, Bradford, joiner . . . . .	1,391 11 9
Brook, Heckmondwike, plumber . . . . .	107 0 0
Metcalf & Lockwood, Dewsbury, plasterer . . . . .	219 3 0
Thornton, Shipley, s'ater . . . . .	108 0 0

**NORTHAMPTON.**

For Building Brick Wall to Front of Bathing Place, Miller's Meadow, &c., Northampton.	
Branson & Sons . . . . .	£275 0 0
Islip . . . . .	215 0 0
White . . . . .	179 0 0
WINGROVE (accepted) . . . . .	150 0 0

**NORTH TYNE.**

For Additions to, and Restoration of, Birtley Church, North Tyne, for Rev. G. Rome Hall, F.S.A. Mr. ARTHUR B. PLUMMER, A.R.I.B.A., Architect, 46 Cloth Market, Newcastle-on-Tyne. First Contract for Wray Memorial Vestry Spire only.	
Fortune, Newcastle . . . . .	£285 0 0
Bell, Bellingham . . . . .	280 0 0
Welton, Barrasford . . . . .	242 13 7
Welton, Mollow Burn Wark . . . . .	225 1 10

**RHYMNEY.**

For the Erection of House, Church Street, Rhymney. Mr. W. LLOYD MARKS, Architect, Rhymney.	
T. Davies, Pentlothy . . . . .	£160 0 0
Morgan, Tredegar . . . . .	139 10 0
D. Davies, Rhymney . . . . .	136 0 0
J. DAVIES, Rhymney (accepted) . . . . .	130 0 0
For the Erection of Three Houses, Rhymney. Mr. W. LLOYD MARKS, Architect, Rhymney.	
J. Davies, Rhymney . . . . .	£450 0 0
Jones, Rhymney . . . . .	441 0 0
Morgan, Tredegar . . . . .	421 10 0
D. DAVIES, Rhymney (accepted) . . . . .	388 0 0

**STOKE-UPON-TRENT.**

For the Erection of Mess-room, Workshop, Coke Store, and Extension of Running Shed, for the Directors of the North Staffordshire Steam Tramway Company, Limited, Stoke-upon-Trent. Mr. G. W. BRADFORD, Architect, Hanley. Quantities by the Architect.	
Yoxall & Heath, Stoke . . . . .	£895 0 0
Minks, Fenton . . . . .	850 0 0
Gallimore, Newcastle . . . . .	845 0 0
Barlow, Stoke . . . . .	840 0 0
Clark, Hanley . . . . .	800 0 0
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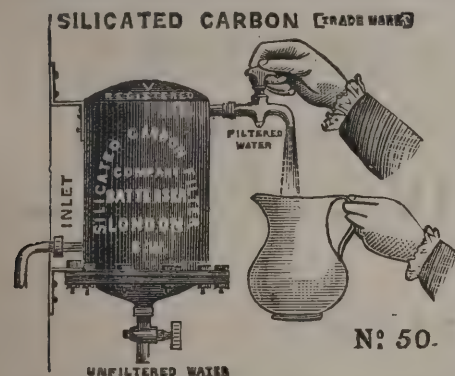
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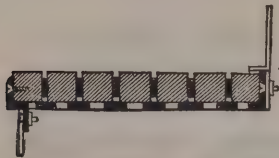


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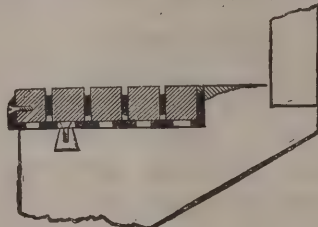
# LINDSAY'S IMPROVED PATENT REVERSIBLE TREADS & LANDINGS FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

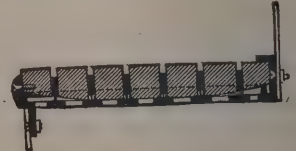
No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## SOME DECISIONS OF INTEREST UNDER THE BUILDING ACT.



THE working of the Metropolitan Building Act, however carefully managed by the district surveyors, must be allowed to have its share of disputes, and we have to report from time to time cases which arise, chiefly in the police-courts, sometimes involving points of interest and sometimes not—we may say generally not. It happens just now, however, that a group of decisions have been recently given which are worthy of more than a passing report. One refers to asphalte roofs, a second to the question of the fireproof separation of suites of offices, a third to the enclosing of one-storey shops, a fourth to the hoarding-in of dangerous structures, and a fifth to the erection of timber merchants' stages.

It may be doubted whether the building public in general quite understand the fundamental principle upon which the legal administration of the Building Act rests. The district surveyor may properly be called, without any disrespect, an officer of police. The regulations of the Act of Parliament are his orders and instructions, and he must of course be fully qualified by experience to interpret their language, and in every proper way to apply them to all operations within his district; but his demands may be disputed to any extent, and then it is the police-magistrate, and not himself, who is master. Thus it comes about that the best way in which to look at any such question of controversy is to ask oneself what view of it the mind of a police-magistrate would be likely to take. It cannot of course be expected that the decisions of the police-courts upon building matters should be always such as to withstand the criticism of experts; but, as a rule, there is exhibited in them a combination of legal skill and good sense which is very much what the public interest requires, even if contrasted with technical knowledge; and when an appeal is occasionally taken to the superior courts, it can seldom be said that the result is more worthy of respect. A magistrate's decision, in fact, may be said to possess a twofold virtue; it is always likely to represent a fair common sense opinion, and at the same time it claims no inconvenient authority.

In dealing with the list of subjects which we have specified above, we will reverse their order. First, it has been decided that the staging which a timber merchant erects to accommodate his stacks of deals and planks cannot in effect be brought in any way under the control of the Building Act. It is not a "building" within the meaning of the Act. That is to say, the owner must take upon his own shoulders all risks connected with it. On the whole, we do not see why the public should be dissatisfied with this conclusion. No doubt it may be thought a matter of some danger, as regards fire, that such enormous masses of inflammable material should be piled up as they are in the thick of houses without any official control; but it would scarcely be the right thing to introduce the authority of a mere constructive surveyor by a legal fiction; it is better that there should be no control at all until public opinion provides the right sort.

Secondly, it having been argued that any building which is being pulled down without being hoarded in is *ipso facto* in a dangerous state, the decision of the magistrate goes to the contrary; and here again we think the common sense of the question has been declared. No doubt many such operations—perhaps most of them—require hoarding for the protection of passers-by, but there must be some which cannot be said to do so; and if the Act implies, as it seems distinctly to do, that the structure must be in itself dangerous as a condition precedent to the necessity for hoarding it in, it may be considered to follow that it is the dangerous state of the structure, and not the danger of the process of pulling it down, that demands the hoarding. That is to say, the Metropolitan Board is not responsible for the mere operation of pulling down a house. There is this to be said, no doubt, that a coroner's jury might possibly be found disposed to fix responsibility upon

some public officer, if it could be done; but we think the decision in the case before us is all the more valuable on that account. It might be a moot point whether a house which is being pulled down is not self-evidently a "dangerous structure" during the process, in so far that some official direction should be at command; but even then the authority of the Board under the present Act of Parliament seems to reach no further than the power of giving notice of the extent to which the pulling down ought to go in respect of any actual danger in the structure itself, supposing it were not to be pulled down at all.

Thirdly, the question how to construct the front of a shop which has been built one storey high over a previously open forecourt has been discussed and settled; we should have thought it had been settled long ago. It has been now decided thus: The enclosure of the front without a "wall" seems to be, strictly speaking, a matter for the license of the Metropolitan Board, as a thing not provided for in the ordinary regulations of the Act; but, inasmuch as thousands of such cases have been passed by the district surveyors in all quarters during many years past without such license, it is considered that the invariable approval of the Board in previous years must have established a rule thus acted upon. This is a purely legal point, and is well settled thus; but it seems to us that if the Board were to issue, upon various other questions besides this, some sort of unofficial by-laws for the guidance of district surveyors, so as to render unnecessary so many applications for special license, the building community would be thankful for a considerable saving of both trouble and time.

Fourthly, we may take the question of roof construction, which is in fact that of the use of the asphalte covering now becoming so common. It was doubted by the district surveyor whether, in view of the rule that all roofs must be "covered with incombustible material," asphalte could be so called. We may acknowledge this to be a difficult point; for most people are certainly under the impression that asphalte of all kinds will indisputably burn, if set on fire, while at the same time no one who has examined an ordinary asphalte roof could very well regard it as a thing that is practically in any danger of taking fire, any more than an asphalte pavement. So many asphalte roofs, indeed, are to be seen throughout London that one might readily suppose the point must have been settled authoritatively before the first of them was finished and passed; but this does not seem to be the fact, and the whole question had to be gone into last week. The district surveyor testified that he had actually experimented upon the material, and found that it burnt freely in a gas flame. This was admitted on the other side to be undeniable. But an expert chemist was called to go further into the matter, and, in consequence of his explanations, the magistrate had no difficulty in declaring his opinion to be—and we congratulate the party of progress upon it—that asphalte (of the kind used for a roof-covering over concrete) is "incombustible material" within the meaning of the statute. Professor ATTFIELD'S evidence went to show that, although there is in such asphalte a proportion of about 10 per cent. of mineral pitch which is directly combustible, and which may be burnt out by the direct application of flame, yet that the other 90 per cent. is earthy matter, quite incapable of being made to burn, and having, on the contrary, the property, like all other earthy matter, of extinguishing flame. As a roof covering, therefore, this asphalte, of about an inch in thickness, if it received fire from the outside (as by burning embers falling upon it from an adjoining house), would at the worst become softened and melted for such a time as the heat might last, producing flame wherever sufficient flame attacked the 10 per cent. of inflammable pitch, but this only to so slight an extent that the 90 per cent. of earthy matter would speedily gain the victory and extinguish it. So far, therefore, so well; but it seems clear that if asphalte in itself is "incombustible material" within the meaning of the Act, then it must be just as much so if laid upon boarding as if laid upon concrete; and this is a point that seems to require consideration, as probably no one would be prepared to encourage the formation of roof coverings by means of asphalte on wood.

Fifthly, we observe that a decision has been given to the effect that, in the case of new buildings which are divided into separately-occupied sets of chambers, the well-intentioned rule that the several suites shall be separated from each other by fireproof partitions and floors shall not apply when the "chambers" are merchants' offices. Now we are quite prepared to admit that there are particular quarters of the town



which require a kind of local interpretation of some of the rules of the Building Act; and possibly in the City (where the case in hand came up) it may be desirable to regard offices for trade and chambers for residence as distinguishable from each other in a way that is not forced upon one's notice elsewhere. But surely, if the intention of the Legislature may be taken to have been the prevention of the spread of fire amongst specifically separated tenements, occupied by persons of some importance, under one roof, the necessity for this in the case of the offices of merchants, lawyers, and others in new City buildings must be much greater instead of less than in the mere lodgings of gentlemen at the West End of the town. We observe that the decision, which was not given by a lawyer but by an alderman—and one who, as a builder, is perhaps the natural enemy of all Building Acts—is to be appealed against; and we cannot help thinking it will be a pity if the appeal should be unsuccessful. The very foremost purpose of the Building Act is to prevent the spread of fire; and if the safeguards which it provides, already far from being efficient, are to be overturned piecemeal upon legal quibbles (witness the notorious "Bristol case," which has done incalculable mischief), the time may come when it will be too late to seek a remedy. In fact, if building law is to be of any use at all, it is a thing to which mere legal refinements ought never to be applied, either on one side or on the other.

### M. JULES LEFEBVRE.

[BY A CORRESPONDENT.]

ON a winter evening of 1853, two lads arrived at one of the railway stations of Paris. They came from Amiens, and their object was to study art. In the pocket of one was a letter of introduction from Monseigneur the Bishop of their native town (Amiens) to M. GUÉRIN, professor of drawing at some unknown school. The boy, JULES LEFEBVRE by name, was strongly recommended by Monseigneur as of excellent character, and the son of worthy parents. His possessions consisted first of the letter, then of a bed and two chairs. His comrade had no letter, but he had a table and a *poêle*. Meanwhile they had a few francs to begin life with. The lads had never been in Paris. They wandered along the unknown streets until, at 50 Rue de l'Université, a *chambre à louer* caught their eye. They hired the room, fetched their furniture, and at once started in quest of M. GUÉRIN. That gentleman received the bearer of Monseigneur's letter with kindness, regretted his own inability to serve him, and wrote an introduction for him to COGNIET, whose *atelier* was the most popular and crowded of the time.

PAUL DELAROCHE, DURET the sculptor, DAVID D'ANGERS, HIPPOLYTE FLANDRIN, &c., had sat at the feet of the old master. To be admitted as his pupil was a distinction and a favour. To him went the country lad. The austere old professor glanced at the introduction and bid the boy attend next day at the studio. Thus, in 1853, commenced the career of JULES LEFEBVRE, for whose *Diane Surprise*, exhibited in 1883, the sum of 37,700 frs. was paid by Mr. DUNCAN, of Glasgow, who bid for it against the French Government, desirous to secure it for the country.

Let not young students imagine for a moment that M. LEFEBVRE leaped at a bound to the splendid position he has attained. From that first unpleasant morning among the Paris trained *élèves* of old COGNIET's *atelier* to the present hour, in the spacious studio of his private residence, 35 Rue la Bruyère, M. JULES LEFEBVRE's life has been one of severe study, unremitting labour, and persevering self-denial.

The lad had no patron, he depended on himself alone. To this fact, and to his own indomitable energy, may be attributed his triumph over difficulties which would have paralysed a less resolute nature. His steady work at COGNIET's attracted notice within nine months of his admission. A pension of forty pounds a year was bestowed on him by his native city of Amiens, which he enjoyed till 1859. This was his first step on the ladder of success. He passed the competitive examination for the Ecole des Beaux-Arts, and thenceforth, after study from life models at COGNIET's in the morning, attended the afternoon lectures at the School, strictly following the usual academic course. Eighteen months after his entrance he received the medal which exempts students from further examination, and was *reçu en loges* the year M. HENNER

carried off the Prix de Rome. He was only honourably mentioned. He therefore competed again the following summer, but was attacked by illness while making his sketch of the subject given, *Coriolanus among the Volscians*, and was compelled to return home. His comrades petitioned the Institute to grant him eight days' respite, which that body agreed to do. Young LEFEBVRE was carried on a mattress to his *loge*, and completed his drawing, which was accepted, but he was unable to bring his picture of the subject to perfection. He won the second prize, M. UHLMANN, whose *Cato in the Senate* has appeared in *The Architect*, being the successful prizeman of the year. In 1860 LEFEBVRE was beaten by ERNEST MICHEL, and victory only crowned his efforts in 1861, with his picture of *The Death of Priam*, which secured for him the Prix de Rome. Once in the Villa Medici, LEFEBVRE felt master of the situation and of his own future. Not for a second did he regret the wild student life of Paris. To the *étudiant du quartier Latin* the *trottoir* of the Boulevards is the pathway to paradise; the gas-encircled doors of public gardens and *cafés chantants* the gates of entrance to that desirable region. With this phase of student life LEFEBVRE had nothing in common. Art was his mistress. By her he was to live; to her he had devoted his life. At the Ecole he had striven to study from her purest sources of inspiration. At the Villa Medici he copied and sketched and painted, not with a view to the *qu'en dira-t-on* of a Paris exhibition, but with the earnest desire for the sake of art to draw from the masters of the old schools the secret of their influence on succeeding ages. The first year of his sojourn at the Villa he obtained permission to substitute a classic subject for the one ordered to be sent home, namely, a copy of WINTERHALTER's portrait of *Napoleon III.*, for the obvious reason that he had already made a copy of that work which had brought him in the first sum of money art had acquired for him. For the said copy, finished a few weeks before he had left France, he received fifty pounds. This was enormous in the eyes of the young student—a sum not to be spent on *parties fines*, but first in defraying some trifling debts contracted in the service of art on painting materials and extra hours of models, and then on the purchase of two shares in the Ville de Paris, which he severally gave to his young sister and brother, remarking as he did so that, having won *le Prix de Rome*, his own material wants were provided for; therefore that he left France with an empty purse but a light heart. Luck from that hour chose him for her favourite.

In place of the copy of the Emperor's portrait ordered by the Ecole for the 1863 *envoi*, LEFEBVRE sent *Charité Romaine* and *La Baigneuse*, since acquired by M. PELPEL. In 1864 he sent *Jeune Fille Endormie*, now the property of M. DESVALLIÈRES, and *Nymphé et Bacchus*, which belongs to the Luxembourg. The former was considered as one of the most remarkable works of the Salon, on account of the delicacy of its execution, the truth of its colouring, and the *maestria* of its draughtsmanship. The tone in the flesh-tints was transparent and soft, in spite of its solid quality, and the colouring brilliant. *Nymphé et Bacchus* was not exhibited till 1866. The nymph is depicted in a sportive mood. She is fair, as is the custom of Dryads, and is seated on a rock in the Sacred Wood. Her Aunt Io has entrusted young BACCHUS to her care. She wishes to make of the child god a mighty hunter, unaware of his as yet undeveloped proclivities as regards the juice of the vine. She holds the bow with which she has shot a bird high above her head. The figure of the child, in his effort to catch both, is thrown back, hence a difficult and admirably given position of both her and his arms. A bust of antique form, exactly opposite young BACCHUS, seems to deride his ineffectual efforts to capture the bow and the game. In 1865 LEFEBVRE sent home *Le jeune Homme peignant un Masque Tragique*. The young Greek is nude. His back is towards the spectators; a scarf is thrown across his figure, and falls in an horizontal line from the right shoulder; from beneath a close cap his hair falls in rich locks; he smiles as he paints the huge mask on an easel before him. Very beautiful is the line of his left arm and hand, in which latter is the paint-jar. His left knee rests on a stool covered by a panther's skin. Three masks, grotesque in expression, and indeed even comic, lie on the ground behind his easel. The town of Auxerre bought *Le Peintre des Masques*. Princess MATHILDE purchased a small *tableau de genre* exhibited the same year, but inferior in merit to the mask painter.

During nine months of the year 1866, LEFEBVRE shut himself into the uninhabited convent of the Santi Salvi, at Florence, for the purpose of making the splendid reproduction,



of ANDREA DEL SARTO's fresco painted for the monks in 1527, which copy may be seen at the Ecole des Beaux-Arts, in the Galerie de Melpomene. The statutes of the Ecole require each student of the Villa Medici to annually send home two works measuring 2 mètres by 1-80. The frieze which JULES LEFEBVRE resolved to copy for the enlightenment of future generations of art students, measures 9 mètres. The formidable nature of the undertaking acted as an incentive to his ambition. Having consulted M. GÉROME as to the work and his chances of success, he took up his abode in the damp and bitterly cold refectory, to the adornment of which ANDREA DEL SARTO devoted his last efforts. A *brasero*, heated by vine twigs, was the only means by which, during the winter months, LEFEBVRE succeeded in restoring animation to his benumbed fingers; but the marvellous beauty of *Le Cénacle* rendered him indifferent to physical discomfort. The story of the frieze is curious. Three years after its completion Florence was sacked by the Imperialists. Greed tempted the free lances to sack convents, wherein they were secure of goodly booty among jewelled chalices and chiselled *aiguères*. When the victorious Teutons burst open the door of the refectory of the Santi Salvi, a cry of admiration burst from their ranks, and while carrying off what else the hall contained, they scrupulously refrained from injuring the old master's *chef-d'œuvre*. After the war was over, the convent was given to an order of *donne nobili*. To these virgins a refectory on the walls of which men, in light and airy vesture, were painted, was a scandal not to be endured an hour. Straightway the lady abbess commanded that the linen stores of the community be searched for a piece, of size adequate to conceal not only from her and her nuns the unholy spectacle, but from that of the abbesses and nuns of the future. Thus it has come to pass that for three centuries ANDREA's beautiful frieze has been carefully guarded from injury by dust or light; and till the city of Florence, in 1826, purchased the convent, the eyes of neither holy nun nor saintly friar were tempted to stray from virtue's narrow path by the contemplation of *Le Cénacle*. It deserves to be recorded that to execute the copy now to be seen at the Ecole des Beaux-Arts not only absorbed the 10*l.* a month allowed to LEFEBVRE, as student of the Villa Medici, but cost him money. No pecuniary consideration, however, hindered the completion of the work. For art's sake he undertook and completed it.

(To be continued.)

## ST. PAUL'S CATHEDRAL.

BY ROGER T. CONDER.

AS the committee for the decoration of St. Paul's Cathedral have commissioned certain well-known artists to prepare designs for the ornamentation of the dome, and these artists are at the present time engaged in the preparation of these designs, I venture with much diffidence to propose an alteration in the form of the four segmental arches, which at present, as is almost universally admitted, disfigure this magnificent work of Sir CHRISTOPHER WREN.

I should hardly venture on such a course as to suggest that anything that WREN ever did could by any possibility have been better done, if it were not that in this particular instance of the arches to the dome no less an authority than Mr. FERGUSSON has spoken of them, in his "History of Architecture," in terms of decided condemnation, to say nothing of what has been said by other critics with more or less claim to public attention.

Mr. FERGUSSON, after referring to the four great arches over the openings to choir, transepts, and nave, says:—

It was impossible that the alternate arches of the dome could be 40 feet wide below, and as they must spring from the same level and reach the same height, a variety of mechanical expedients were necessary, which have become real deformities in practice. They might to some extent be remedied now—for instance, by introducing two pillars standing free and carrying the entablature horizontally across, and supporting a real tribune, with a bold balcony in front, in place of the present curved cornice, or by some such expedient.

Again, in a paper read before the Royal Institute of British Architects, on May 30, 1859, Mr. WIGHTWICK referred to these arches in the following terms:—

The Whispering Gallery of St. Paul's, with all above it, leaves nothing in the way of architectural forms to be desired, though there are many who

think the character of painting adopted most injudicious. Below the gallery, however, criticism rests dissatisfied, if not offended; the four diagonal sides of the octagon beneath the tambour of the cupola evincing an aim at more than the artist has successfully accomplished. To obtain an appearance of open lightness developing the architecture and vaulting of the aisle behind them, these diagonal compartments are woefully cut up and finished with ingenuity at the cost of judgment. It had been better if these compartments had simply exhibited repetitions of what is practised in the nave, choir, and transepts, so far at least as was possible. There is no occasion for more than simple reference to defects which have ever been obvious to the critical eye. The confusion of these parts is positively so distressing that alteration would be justifiable—only taking scrupulous care that it be effected by that repetition of Wren's own, to which allusion has just been made. St. Peter's had many architects. The substitution of a better piece of Wren for another in the same building would not disturb the oneness of itself or its designer.

Mr. WIGHTWICK, who gave utterance to these sentiments, spoke in this same paper of the dome in terms of the highest praise, referring to it as "indeed the very crown of England's architectural glory," a fact which shows that his criticism of these arches was not prompted by any petty feeling of hostile criticism.

In suggesting any alteration to a public and national monument of the nature of St. Paul's Cathedral, the masterpiece of one of our greatest architects, and one of the most beautiful churches in Christendom, we have to meet with the opposition not only of those who consider that that monument is entirely beautiful in itself, and perfect in every particular, but also of many who, whilst they may admit a defect here and there, do not consider these defects of sufficient importance to justify us in altering the work of our ancestors in any respect—even though they were of the grossest description. In fact, some consider that such a building should be kept intact as a national and historical monument. Whilst admitting the relevancy of this objection in many cases, I consider that there are and must be many exceptions to the application of such a rule; as, for example, when a building has fallen into a dangerous state of disrepair, and also in such a case as St. Paul's Cathedral. For this reason. St. Paul's is essentially a modern building, and it is the argument of those who wish to decorate the building that it is not *complete*, and will not be till it is decorated. This view is generally held by the public at the present time. The cathedral church of St. Peter at Rome was erected under the superintendence of several architects, who did not each feel bound in every particular by the intentions of his predecessor, but carried out slight alterations.

If this was done at St. Peter's, there can be no reason why it should not be done at St. Paul's also. The cathedral is more a *national* monument than a monument to the genius of Sir CHRISTOPHER WREN, and I consider that a serious defect, such as these segmental arches admittedly are, should be set right before the artist is employed to decorate the architect's work.

The accompanying illustrations show a proposed alteration of these arches, which will be found to correspond very much with the suggestion made in Mr. WIGHTWICK's paper read before the Institute of Architects; for the compartments, as shown on this drawing, simply exhibit "repetitions of what is practised in the nave, choir, and transepts," and the alteration would simply consist of "substituting one portion of WREN's work for another," which is condemned.

The arch as shown on the drawing would be of the same span as the aisle arches in the transepts; the only difference would be that the soffit of this arch would consist of one arch only instead of two grouped together, though this soffit would necessarily be broader than the soffit of each of the single arches grouped together to carry the aisle arches, and would rest upon a single pilaster to correspond. This would be necessary in order not to interfere with the passage-way into the aisles of the choir and nave from the dome, by the insertion of coupled pilasters and arches.

A reference to the plan will show that these pilasters would in no way interfere with free access to the aisles.

The view up the aisles would not be interfered with in any respect, whilst this positive advantage would accrue, that the arch being placed at this lower level, the attention of a person standing in the aisles of the nave looking eastward would be attracted to this arch, and would be gradually led away into a recognition and appreciation of the fact of the existence of the great space of the dome, which is the point in which the whole interest of the church is centred, and up to which all the rest of the architecture leads.

Another great advantage that would be gained by this alteration is the following: If the jambs of the balcony open-



ings were arched over in such a manner as shown in the drawing—being an arch struck from the same centre as the main arch supporting the dome—the apparent strength that such an arrangement would give to the point of springing of the eight great arches supporting the dome would be of inestimable value. These eight springing points at present give one an impression of weakness and insecurity. The arch over the balcony would present a fitting place for the mosaicist; and supposing the eight large spandrels between the eight great arches were suitably decorated in mosaic or painting, the arches would stand out distinct, and the combined alterations would give an appearance of strength and simplicity which these supports to the dome at present lack.

The only objections that would be likely to be raised to the alteration, beyond the objection to altering anything whatever in what Sir CHRISTOPHER WREN built, would be:—

1. That some might consider the view up the aisles interfered with. I think, however, on reference to the plan that this would be found not to be the case to the slightest extent, in so far as the view up the aisles themselves is concerned, and anyone that knows St. Paul's knows that no view is to be obtained up the choir aisles either from the nave or dome.

2. The comparative thinness of the proposed new arch might also be raised as an objection; but I do not think that this objection would be sufficient to condemn the proposal.

In making this suggestion I feel that when such a very slight alteration is wanted—and that to carry out the very idea that Sir CHRISTOPHER WREN himself would in all probability have carried out had he not been in an unfortunate moment seized with an extremely ingenious idea—no mere idea of respect for the memory of the genius who designed this building should stand in the way of removing such blots on a magnificent national monument.

To decorate these arches would be simply a lamentable waste of time, labour, and precious material; and if they were left in position, either decorated or undecorated, they would go a long way to mar the effect of the whole dome after it had been decorated—to as great, if not to a greater extent, than they do at the present time.

## STUDIES OF SOME LONDON CHURCHES.

(Continued from page 32.)

THE Church of St. Mark, East Street, Walworth, has about the widest nave of any in London, *i.e.* 37 feet. It is of considerable height, and externally, as one stands at the west end, there is no sign of any aisles. A hyper-critic might therefore say that the principle of design was wrong, as it did not reveal its true story. But in this case two objects for the treatment adopted evidently existed. There can be no doubt the long unbroken roof which covers both nave and aisles is cheaper than a break in the line. As there are other buildings which about the church at the west end, and the sides are thus hemmed in and concealed from outward view (there being no roads north and south), the side elevations had not to be much regarded. Far from it that any part of God's House should appear neglected and uncared for. But it was no object when funds were very limited to give an ornamental appearance "to waste its sweetness on the desert air," *i.e.* the back yards of artisans' cottages. It may be said Art ought to penetrate everywhere, but at present that happy consummation has not been reached, and it is better to try and reform the so-called Art which too often blazons itself in great London thoroughfares, rather than to exhibit it where not one in a hundred will ever give it an appreciative glance. From what has been said, it will have been gathered that no clerestory to St. Mark's Church exists. Sufficient light is obtained by means of lancets to the aisles, and through a large traceried window at the east end of the chancel. The tracery of this latter is of rather too intricate and elaborate a device to harmonise with the simple severe lancet treatment elsewhere adopted. Granted it is proper to make the east window the richest and most ornamental in the church, there are modes of doing this in the Lancet style; witness the exquisite examples at Rievaulx and Whitby Abbeys, with the lurking dogs' teeth in the deep-set hollows. The manner in which the porches at the western end of St. Mark's are planned is very good. The end of the aisles is walled off, and doorways into the church face north and south respectively, the outer porch

being to the west. There is likewise a central west door, with out lobby or porch, intended to be used only for egress. This arrangement, though not unique, is not so generally adopted as it should be, for by its means the penetration of cold and draughts is to a large extent prevented, and it is superior to the pretentious "narthex." The latter is frequently adopted in combination with showy façades, and generally leads into an interior miserably belying the ambitious entrance portals. There can be no more fatal mistake than this, misleading the worshipper by making the outside of the platter clean and spruce, and disappointing him when he finds the Temple itself so inferior to its threshold. We do not find it so in Mediæval examples. If the doorways are stately and magnificent, the interior is as a rule at least equal to them in appearance and detail, if not superior. The actual place where prayer and praise is offered up is surely the more fit for architectural embellishment. Although the west end of the nave and aisles of our subject are all flush, the roofs of the latter—*i.e.* over the porches—are hipped back. This has the effect of giving greater height to the nave, viewed externally. The church is lined with stock bricks, naturally treated, the endeavour throughout having been to build economically, but effectively, on small means. The wood cradle-shaped roofs are ceiled and have tie-rods, but no king-rods. The aisles have flat ceilings constructed of V-jointed boarding with a plain chamfered wall-plate, and are certainly rather poor. At the period when the writer inspected the church the aisles, which are about six or seven feet wide, were without fixed benches. To sum up the merits of this structure, though the detail of the work is not equal to the general design, notably in the mouldings to the nave-piers and to the chancel arch capitals, the proportions are good and well-studied. Much ingenuity has been displayed in working on Mediæval lines, while adapting them to the requirements of the Church of England. We see no tame copy of a church of the Middle Ages; but one displaying, as it ought to do, the spirit of the times in which our lot is cast.

The Church of St. Michael, Shoreditch, is well known, no doubt, to the student of modern ecclesiastical architecture, for it has been built some years, being about the first erected of that noble group whose forms were moulded by the genius of a BROOKS. It is, however, of a rather different character to the later works of the same master—*i.e.* St. Chad's, Haggerston; or St. Columba, Kingsland Road. From the outside the church favourably impresses the spectator, who will not fail to observe the picturesque and richly-treated bell-turret, well placed over the east wall of the nave in the situation where of old was the Sanctus bell-cot. Internally this feature is equally effective, set on a kind of double chancel arch, which prevents its being flimsy in substance, a far too common fault. The bell is rung just within the chancel gates by a man wearing a surplice, facing east. Is not this a vast improvement on the practice common fifty years since and still prevalent in many a church, where four or five men in their shirt-sleeves ring a lusty peal up out of sight and beyond control, on the belfry stage? In this case, when the ringer has done his office, he walks into the chancel seats, and takes his place among the choir men, thus aiding in another capacity the reverent conduct of the services. It is to be regretted that architects do not more often place the bell turret over the chancel arch and make a special provision, showing internally, for carrying it. This, then, might often lead to telling combinations. The nave arcade of St. Michael's is very "severe," as in order that the walls may properly sit on the cylindrical piers an unusually large chamfer has been used, or, in other words, a regular-sided octagon has been placed over the circular plan. Mr. BROOKS, like Mr. BUTTERFIELD, rather affects plain open-timbered roofs with lath and plaster between the rafters, and in the chancel of this church one cannot but wish there was something a little richer. Surely the roof of a fine, stately structure, its crowning point, ought not to be the plainest portion of the whole composition. It was not thus that the Middle Age men designed. The scene, when the writer visited this church one Eastertide, was most impressive—the lighted candles borne in procession by the choir, the smoke of the incense, the Paschal candle burning clearly on the north side. The last is a practice of the Early Christian Church revived, for it need scarcely be said that in many of the earliest churches of the "Eternal City," the beautiful Paschal candlestick still remains to charm our eyes.

Still keeping to the east of London a visit may well be paid to a church of no extraordinary character, St. Benet's,



Mile End Road, substantially built of red brick and church-like in its arrangements, as are all those designed by the architect (MR. CHRISTIAN). Both the tower and spire require greater height to be effective, but the absence of this is for a common reason, namely, want of money. There is a very large and spacious vestibule to the west end, extending the whole width of the church, with three doors. The interior of the building is of red brick. The piers of the nave arcade are raised on bases too high to look well. The manner, also, in which the irregular-sided octagonal capitals, *i.e.* four wide sides and four narrow sides, rest on the circular bells, is not very happy, as the change of plan is sudden instead of gradual, the octagon blending insensibly into the round. The pulpit is of an unusual plan and about 6 feet long; it is an oblong, the long side facing west, there being broad steps up from the chancel, the whole length of the pulpit, which is corbelled out into the nave by means of a ribbed cove. No particular beauty exists in this arrangement, which was probably suggested by some expressed wish of the usual occupant of the pulpit. It reminds one of the immense Continental examples, where the impassioned preacher can walk to and fro and address himself in succession to different sections of the worshippers, finding abundance of space in which to declaim with the utmost vehemence and action instead of being confined within very narrow limits.

Another church, not far from St. Benet's, is worth inspecting—*St. Matthew's*, Stepney. It is plainly and substantially built of brick, with an evident eye to economy. The exterior has little in it to attract observation or comment. The bricks and masonry are cut as little as possible, so that in the window tracery the appearance is somewhat crude. There is another feature, no doubt adopted to save cost, but which at the same time is effective, *i.e.* the side walls are of fair thickness, but divided into panels by segmental pointed arches. The capitals to the nave arcade are octagonal, with the four wide sides facing the cardinal points and four narrow angular sides. The transition from the octagon plan to the round seems well managed. The capitals support square-edged brick arches with an inner square stone order. The chancel arch respond pier does not come down to the floor, but is corbelled back by a series of square brick set-offs. In such an important position it would surely have been better to have employed some treatment a little less severe. Taking this church as a whole, it is a good, honest building, well adapted to its purpose, and perhaps better suited to the class of worshippers likely to be present there than a structure of a grander type, which is apt to frighten a poor person.

The *Church of St. Andrew*, Fulham, has some rather unusual features. For example, the spire is of brick. This can be little less costly than stone, and is certainly not so pleasing in appearance as a slate or tile covering, or even a lead-covered spire. The natural manner, however, in which throughout this building the bricks are treated—that is, without being cut—is satisfactory. In the east front this is especially noticeable, though monotony is avoided by a few chamfered set-offs. Some of the slit windows instead of being arched over, or having stone heads, have over-sailing courses of brickwork. Although the east gable cross is not very well proportioned, the design is original and ingenious, the emblem of the patron saint's cross being introduced within a vesica. A rather rich pattern of sgraffito is introduced internally to the stone soffits of the nave arcade. One cannot but think that such a decorative feature might have been used in a more suitable place, say in the plain surface of wall, sooner than in a position where solidity of appearance is most desirable. The nave roof is open-timbered, with trusses opposite each pier, seeming to be some 15 feet apart. But instead of the more usual treatment of an intermediate and less substantial truss, every sixth common rafter is trussed with braces, which has a good effect. In the aisles the purline set upright has its bearing reduced by curved struts. The trussed rafter arrangement consumes some extra amount of timber, but is always pleasing in perspective, and makes a very strong roof.

When any church of MR. WILLIAM WHITE'S is examined, one may be sure there will be evidence of independent thought and originality in it, though, happily, this architect never runs riot with his crotchets, but keeps within sober bounds. One may be also sure of solidity and good, sound, honest construction, and an absence of meretricious stuff. Bearing in mind these characteristics, let us briefly examine the *Church of St. Peter*, Clapham Junction. At the west end the rather unusual

plan of a semi-octagonal apse has been adopted, while the east end is square, having a triplet window, the central and highest one uncusped, the side ones cusped. Coloured bricks, in a quiet, sober manner, have been introduced externally with good effect, and the monotony of the gray stock brickwork thus well relieved. The weatherings of the buttresses are managed by a series of brick set-offs, half-chamfered, which, though a little dearer than the ordinary plan of having one continuous slope and cutting the bricks, is certainly more pleasing. There is a nave of very considerable width; and as there are only four bays, with one shorter bay, the building rather lacks length. The roof is strongly constructed—a judicious plan when the nave is not only of great span, but also of considerable height. There are massive tie-beams, their bearing being reduced by strong curved brackets. The collars occur at a rather high point, and then the roof is ceiled in wood. The arched braces springing above the beams are coupled together. There is no chancel arch, and the ridge runs continuously from end to end. The chancel roof has a hammer-beam instead of tie-beam construction, with figures of angels under, the span being less than that of the nave; the principals are also placed at a less distance apart. The clerestory is lofty, but, as almost inevitably happens, this has involved a diminution in the importance of the nave arcade. It is, of course, quite possible to have both these elements of architectural grandeur where expense is no object; but in many churches built nowadays one or other of the beautiful features alluded to must suffer. In the middle of towns, where buildings abut closely on the church, there can be no question but that the lofty clerestory is to be preferred to the lofty arcade. Some parts of the internal walls are plastered, the others lined with brick. This is a good plan, as a church with brick throughout is apt to look somewhat sombre; while if rough-stuccoed it looks poor and bare, longing to receive that decorative colour for which it has to wait—not months, not years, but too often till the Greek kalends arrive! But if a proportion of the internal surfaces is judiciously coloured, the building is warmed up and relieved, while the contrast with the plainer brickwork serves as a foil to still further lighten the decorative parts. The skeleton-framed bench ends are not secured together flush, as usual, but one piece slightly let into the other, which adds a little to their strength, but not to their ornamental look. It is to be regretted that in the passages tiles of so large a size as 6 inches square have been used, whereas the smaller size, 4½ inches square, would have better suited the building.

What a standing study is *St. Margaret's*, Westminster, to two very opposite factions. First, that numerous following who do not like anything which they think tends to obscure—they want to have everything open, so that you can see all of it at a glance. This party, it will be remembered, in the time of the late Canon CONWAY, were always clamouring (and the same cry has arisen since then from time to time, though not so loudly called out) to have his church swept away because it spoiled the appearance of the Abbey. Second, in later days, since Canon FARRAR was appointed, a Society has been formed who in the first days of their youth would have liked nothing done at all to *St. Margaret's*—would have loved to see it remain as in times past. They have grown a little more practical since, and realised the impossibility of carrying out in its entirety their original programme. Yet what has been done at the interesting church in question cannot be said to have fulfilled the aims and wishes of this ultra-conservative association. What a splendid riddance of dusty cobwebs which choked up and hid the beauties of proportion has been effected by the removal of the galleries, and by the partial restoration of the debased windows by the insertion of tracery of good Perpendicular character! A glance at the contrast between these two types of windows, side by side, in this church, ought to be sufficient to convince the most anti-restorationist as to which is best. The ceilings are entirely new, and come out effectively. The half-blank bay at the east end of the building is curious, and evidently has always been so, if one examines the clerestory, where the one-light window occurs in this place. The chancel was destroyed many years ago, and for obvious reasons could not now be restored. The chancel is, however, emphasised by a curved brace of greater depth occurring in the ceiling to mark the end of the nave, and a larger amount of ornamentation in the ceiling, as well as by the raised level of the pavement, &c. The curious old Dutch cinque-cento painted glass in the east window, the history of which is so well known, was so decayed that during the restoration Messrs.



CLAYTON & BELL were forced to enclose it in plate-glass, which somewhat impairs the full effect of the colouring, but was, of course, the only thing to do if it was to be preserved at all. The oak reredos, with its projecting carved canopy well terminated at the ends, and *The Supper with the Disciples at Emmaus* sculptured in the centre, is an effective feature, giving force and vigour to the composition, which would have been otherwise flat. The coloured decoration to the east wall helps to bring this end of the church into harmonious tone. Certainly before the recent alterations few persons, however experienced in such matters, would have realised what a good interior St. Margaret's possessed, thickly cumbered up as it was with incongruous modern work. We can now admire the well-moulded and good-proportioned graceful nave arcade, with the tracery in the spandrels and pretty range of clerestory windows, deeply splayed downwards. The antiquary and citizen cannot but be thankful that this structure has been preserved to the present day and its renovation so well carried out. Even in Stow's time there was a talk of pulling it down. In PETER CUNNINGHAM'S "Handbook of London" (1869) it is spoken of as threatened.

(To be continued.)

### A PHOTOGRAPHER'S RIGHT TO LIGHT.

THE Court of Appeal, as will be seen from the report we published last week, has granted a mandatory injunction restraining the First Avenue Hotel Company, Limited, from allowing their newly-erected building in Holborn to remain an obstruction to the access of light to the windows of a house adjoining, and occupied by a photographer, who was the plaintiff in the action. In other words, the defendants will be compelled to pull down the portion of the building obstructing the access of light to the plaintiff's windows. The case presents features which are unfortunately not of uncommon occurrence. There is the usual blunder about the angle of 45°, and the refusal of the Court of Appeal to accept any such criterion as a rule of law. There is the injury through loss and delay in the completion of the defendants' building, and, on the other hand, there is the injury caused to or anticipated by the plaintiff in his business of a photographer. These, we repeat, are not uncommon incidents to "light and air" cases; but it must be evident to all that serious injury to property and other attendant evils follow from the uncertain state of the law upon the question. In cases of this kind there is, of course, always an aggressor, and it is only fair that the individual whose rights of property are attacked should receive protection from the law. But, on the other hand, it is as manifestly inexpedient that great public improvements should be hindered, if not altogether prevented; that capital should be uselessly expended and labour unavailingly bestowed in consequence of the unreasonable protection afforded by law to private rights at the expense of the public advantage. The Legislature has not scrupled to interfere with, and even to confiscate, the rights of individuals where their exercise is clearly in conflict with the public good. We admit that such legislation should be scrupulously guarded in character, but some such legislation is evidently necessary with regard to ancient lights, if the repetition of cases so ruinous to private enterprise and public improvement as the one we are referring to is to be prevented.

It must not be assumed that we are dissenting from the views expressed by the learned judges of the Court of Appeal on the law, but we venture to question the expediency of their late decision none the less, and to express an opinion that the discretion vested in the Court might have been exercised with a greater advantage to public interests. Sir HUGH CAIRNS' Act was passed with the object of conferring on the courts of equity the power of awarding damages to the party injured, either in addition to or in substitution for an injunction. It was then recognised that the courts of equity required enlarged discretion to deal with that class of cases where the law gave great opportunities to persons so minded to harass their neighbours and extort money, under the guise of damages, for obstruction to light and air. The exercise of that discretion has been narrowed by the practice and decisions of the courts of equity to those instances where the circumstances of the case show that the injured party has

regarded the injury as capable of being compensated by damages. Vice-Chancellor MALINS, in the case of *BARKER v. LINDSAY*, expressed his views on this subject as follows:—

It is not likely you will induce me to order the Grosvenor Gallery to be pulled down. It is a mere question of money. One side says 300*l.*, the other 600*l.* By the terms of the order the defendant is bound to pull down if the Court shall direct. Considering the plaintiffs have got accommodation elsewhere, for me to order any portion of the Grosvenor Gallery to be pulled down I think would be hardly just, when I see that money would compensate. Whilst the owner of ancient lights is to have due protection, it must not be to such an extent as to render improvements impossible.

On the other hand, it is not to be assumed that the judges are unanimous in their opinions as to the principles upon which the exercise of their discretionary powers should proceed. It is much to be regretted that opinions widely differing from those last quoted, more narrow and less satisfactory from the public point of view, are to be found in the judgments of eminent judges. The late Vice-Chancellor WICKENS remarked, in the case of *DENT v. The Auction Mart Company*:—

It cannot be contended that those who are minded to erect a building, that will inflict an injury upon their neighbour, have a right to purchase him out without any Act of Parliament for that purpose having been obtained. It appears to me that it cannot safely be held that this Court will allow parties so to exercise their rights which they may have in their soil as to inflict an injury on their neighbour, if the neighbour is unwilling to take any compensation; or even though he be willing to take compensation, if he is not ready to submit to the valuation of a jury, but insists on his own right to determine what the value of his property is. It was said there had been negotiations, and Messrs. DENT were willing at one time to have taken 2,000*l.* for their right to oppose the erection of these buildings. After that it was said to be impossible to regard this as a case of irreparable injury, and that therefore the only ground on which a court of equity interferes in cases of trespass failed. If a man says he will take 2,000*l.* that affords some measure of the amount of the injury. The argument, therefore, would result in this, that because a man says he considers the inconvenience and annoyance is so great as not to be estimated by the amount of money damages which a jury would fix, but that he is willing, as some persons are, to sell his comfort and ease for a high pecuniary reward, therefore he is to be compelled to go to a jury who might award him some 100*l.* or 150*l.* His comfort is to be taken away, not at his own estimate, but at the value which a jury might put on it. That would be conceding to those who are desirous of erecting lofty buildings the existence of some unknown Act of Parliament, containing all the provisions of the Lands Clauses Acts. It appears to me that is a mistaken view of the jurisdiction of the Court.

On what principle will the courts proceed to exercise their discretion, and by what circumstances will that discretion be guided? The Court of Appeal in the case we are discussing disagreed with the application of the old practical rule in ordinary cases, that an unobstructed access of light should be allowed to the plaintiff's windows to the extent of an angle of 45°. There can be no doubt that where a right to light has been acquired by an uninterrupted user of nineteen years and a day, the courts take into consideration the purpose to which that light has been used in determining the question whether a building is an obstruction or otherwise. The angle of 45° might or might not allow sufficient access of light; it is a question of fact to be determined by evidence, and not by angles or hard-and-fast lines. The jeweller who requires a pure uninterrupted light for his business, or the person who requires a strong light for the examination of samples, or the case where a plaintiff's business was cleaning ostrich feathers and making artificial feathers, are examples of the varied character of such claims. The business of a photographer is one which, no doubt, requires uninterrupted access of light in an essential degree. The idea that the necessary access of light in all these instances can be determined by an angle of 45° is doubtless erroneous, as Lord Justice COTTON observed; and we must assume that, for the purpose of this case, the access of light to the plaintiff's windows was obstructed in a material degree by the defendants' buildings, even though they stood outside the angle of 45°. Nevertheless, we revert to the original question, Is this injury incapable of being compensated by damages? Are the plaintiff's premises incapable of being rebuilt or altered to suit the exigencies of the case, and thus enable him, if it is absolutely essential that he should do so, to continue to carry on his business in the house? The Court of Appeal have, however, directed the demolition of the obstructing portions of the First Avenue Hotel; and, unless wiser counsels prevail, this handsome building will share the fate which the Grosvenor Gallery narrowly escaped a few years ago.



## PARIS NOTES.

THE following awards have been made to French artists in the painting section of the Amsterdam International Exhibition: Gold medals to MM. Aublet, Agache, Butin, Carolus Duran, Cot, Duez, Lévy, Gervex, Maignan, Laugée, Luminais, Popelin, Belcourt, Roll, and Mme. Demont-Breton. Silver medals to MM. Béraud, J. L. Browne, Cazin, Decominck, Dantan, Goeneutte, Landelle, Lansyer, Maillard, Depenne, Protais, Rivey, Rixens, Thomas, Worms, Yon, Watelin, Leroux, Soyer, and Mdle. Henriette Browne. Diplomas of honour to MM. Morot, Pelouze, Rousseau, Hébert, Bastien-Lepage, Delaunay, and Bernier.

The municipal authorities are negotiating with the Government for the acquisition of such fragments, saved from the ruins of the Tuileries, as may possess interest from their connection with Parisian history. The Council has already voted several thousand francs for this purpose, and it is intended to place these fragments in the Cour d'Honneur of the Hôtel Carnavalet, by the side of the many other architectural specimens of great historic interest possessed by the city.

An important opinion has just been given by the conference of French barristers, to whom the question had been referred, as to whether the sale of a picture without reservation confers on the purchaser the right of reproduction. The lawyers have decided in the negative.

The preparations for the first exhibition of the Triennial Salon, to be opened on September 1 next, are being rapidly pushed forward. The Palais de l'Industrie has now been entirely cleared of the exhibits of the annual Salon, and handed over to the Departmental Committee that has been entrusted with the organisation of the new exhibition. It is intended so to arrange this Government Salon as to display to the very best advantage the comparatively few favoured works that will be selected by the jury; while in point of taste and the artistic splendour of accessories, it is not too much to say that the exhibition bids fair to surpass anything yet seen. The sculpture section, in particular, which will be installed on the ground floor as at the annual Salons, is to be hung throughout with the magnificent national tapestries belonging to the Garde-Meuble. The first floor galleries, exclusively reserved for paintings, will also be fitted up on an hitherto unknown scale of luxury, and, the number of works being strictly limited, each exhibit will have plenty of scope, so that no artist will be able to complain that his creations have been skied.

The managing committee of the Trocadéro Musée des Moulages has taken steps to acquire casts of Brézé's tomb in Rouen Cathedral and of some remarkable statues contained in the Basle Cathedral. Owing to the repairs now being carried out in the last-named edifice, these statues have been taken down from the niches, and their reproduction in plaster will thus be greatly facilitated. The committee has further decided upon a measure, the adoption of which may be looked upon as of international importance and benefit. This consists in the collection and publication of cheap photographs for the use of schools of design and other educational establishments of all the principal monuments, not only of France, but of all other countries.

The French school at Athens has received the necessary authorisation to continue its excavations at Delos during the present year, but will not recommence operations as long as the island is used as a lazaret for the reception of passengers from Egypt submitted to a quarantine of eleven days.

M. Ballu, jun., son of the architect of the Hôtel de Ville, is engaged in organising for the opening months of next year an Exposition des Dessins du Siècle, to be held at the Ecole des Beaux-Arts. The proceeds will be handed over to the Society of Artist-Painters, Sculptors, Architects, and Designers, founded some years ago by the Baron Taylor.

The group representing the Defence of Paris, to be inaugurated on the 5th of next month at the Rond Point of Courbevoie, will be erected on the granite pedestal upon which the statue of Napoleon I. formerly stood. It consists of a central female figure in military uniform, wearing a mural crown, and personifying the city of Paris; she is leaning on a broken gun-carriage, and, with her sword, protects a wounded soldier lying at her feet. A child, crouching amidst fascines, symbolises the sufferings of the inhabitants during that terrible winter. The President of the Republic, M. Ferry, the Premier, and General Thibaudin, Minister of War, have been specially invited to attend at the unveiling of

this memorial, for which also the greater part of the Paris garrison will be paraded.

It appears that the question of utilising the ruins of the Palais de la Cour des Comptes, burnt under the Commune, is entering upon a new phase, and will probably be resolved in a very utilitarian sense. None of the projects elaborated either by the Government architects or by the City Works Department having been found practicable, owing to the enormous expense of rebuilding the ruins on the lines of the original edifice, it is now proposed to hand over the building to private industry. A number of architects visited the spot last week, and unanimously agreed that the arrangement of the ruins utterly precluded their adaptation to any trade or manufacture whatever, and that it would be preferable altogether to remove the upper part of the ruins, leaving only the cellars and basement as foundations. These have resisted both the fire and the onslaughts of time and weather, the cellars, in particular, being so solidly built that even when the Seine is at its highest no water has ever been able to find its way into them.

## THE NORTHUMBERLAND AVENUE HOTEL.

THE foundation-stone of the Northumberland Avenue Hotel was laid, on the 19th inst., by Colonel C. S. Dowson, the chairman of the company. The site is over 350 feet in length, and lies between the offices of the Christian Knowledge Society and Charing Cross, thus occupying nearly the whole of one side of the avenue. The entrance to the hotel will be in the centre of the façade, and will lead direct to the inner hall and grand staircase. Right and left of this entrance will be found offices for the manager, the staff connected with his department, telegraph office, &c. At the end nearest to Charing Cross will be provided a restaurant and buffet, grill room, and smoking room, all self-contained, and forming a feature of the hotel, of which the public can avail themselves without residing in the building. It is understood that the Electric Railway Company, which is to convey passengers from Waterloo to Charing Cross, were negotiating with the directors of the Northumberland Avenue Hotel for a portion of the site at the northern end for the purpose of a station, so that passengers arriving from the south and south-west of England could, on alighting from the railway, pass into the hotel without going into the open air.

The other features of the ground-floor will be the *salle-à-manger* 100 feet long by 42 feet wide and 30 feet high, with wings at each side, giving an extra width of 26 feet. Architecturally, this is intended to be one of the most imposing dining-halls to be found in the metropolis, and the comfort of those using it will be considered in all the details of lighting, warming, and ventilation. The other notable rooms on the ground-floor will be the coffee-room, the ladies' drawing-room, general reception-room, billiard-rooms, and smoking-room. Indeed, all the reception-rooms will be found on this floor, the directors having resolved not to devote any of the ground-floor area to purposes unconnected with the hotel.

The grand staircase will be 44 feet wide, and will consist of a central flight and two returns. The walls enclosing it will be lined with marble, and there will also be a marble colonnade and balustrade round the dome, through which light will be admitted to the staircase. Visitors to the hotel will have the option of using it or availing themselves of the lifts, which will be provided at convenient stations in the corridors. Suites of rooms suitable for families will be provided on the first and second floors, and it should be noted that a great many of these rooms will have bay windows commanding excellent views both of the river and Trafalgar Square. Suites of rooms will be provided for private dinners and for masonic parties. The whole of the floors will be of fireproof construction, with iron balconies and staircases at the back communicating with the corridors on each floor, thus affording a ready means of escape in the event of fire. There will be four floors exclusively devoted to bedrooms, and on the top, or seventh floor above the ground storey, will be found the kitchen and the culinary department. The total number of rooms, exclusive of the public reception and private rooms will be upwards of five hundred. The front façade will be entirely constructed of Portland stone and polished granite. The elevation will be upwards of 100 feet in height. It is designed in the Renaissance style, and will be surmounted by Mansard roofs.

The works are contemplated to occupy some eighteen months, and it is thought the hotel may be finished and ready for occupation for the season of 1885. The estimated cost of the building is 200,000*l.*, to which must be added a further sum of 70,000*l.* for decorations and furniture. The works in building are entrusted to Messrs. Perry & Co., of Tredegar Works, Bow; the decoration and furniture will be confided to Messrs. Gillow & Co., of Oxford Street; the architects being Messrs. Isaacs & Florence, of 3 Verulam Buildings, Gray's Inn. Mr. A. Wheatley is general foreman, and Mr. Charles Tell, the clerk of works.



## NOTES AND COMMENTS.

THE result of the second competition for the proposed Municipal Buildings in Nottingham suggests the difficulty of deciding when there are a few selected competitors. In the first stage there were 117 plans submitted, and from them eight were selected, five being by provincial and three by London architects. The authors were MESSRS. TRUMAN & PRATT, of Nottingham; Mr. YEOWILLE THOMASON, of Birmingham; Mr. CORSON, of Leeds; Mr. HICKSON and Mr. OLDHAM, of Manchester; Mr. CHARLES BELL, Mr. WILLIAM HARVEY, and MESSRS. VERITY & HUNT, of London. Mr. HARVEY was, we believe, unable through illness to take part in the second competition, and consequently there were seven competitors. They adopted new mottoes. Mr. WATERHOUSE undertook the office of judge. He reports that the two designs "Wisdom, Strength, and Light" and "Queen Bess" are of equal merit; but there is a difference in the estimated cost. The first is put down at 128,416*l.*, and the second at 118,500*l.* The provinces as well as London have a share in the victory. Mr. WATERHOUSE considers "Sepia" to be next in merit. It is the most expensive design, for the author's estimate is 157,883*l.* The remaining designs are signed "Esperance," "Strive to Thrive," "Speedwell," and "Fiat." The corporation have to decide whether one of the designs will be accepted.

THE O'CONNELL monument, in Sackville Street, Dublin, which has been in hand for several years, is now complete, and the accounts for the work have been settled. The commission for the memorial was given to the late JOHN HENRY FOLEY, R.A., and after that sculptor's death, it was entrusted to his friend, Mr. BROCK, A.R.A. Mr. ARMSTEAD, R.A., has testified that "Mr. BROCK has modelled and carried out the design of the late Mr. FOLEY with remarkable vigour and ability, and with the utmost care as to sound and good bronze castings, and well executed masonry." The sum paid to Mr. BROCK has been 10,500*l.*, and a large sum was advanced from time to time to Mr. FOLEY. The plaster models are in the foundry at Thames Ditton, and may be obtained by any Irish municipality or institution on application. The memorial is generally considered a success in Dublin, but from some points of view the pedestal is supposed to be too large for the figure.

SCIENCE has been said to be the knowledge of many persons made systematic, so that it may be acquired by one person. Is it, then, possible to give such a scientific form to the valuing of land and houses? At the present time that question would be answered in a different way by the House of Lords and by the Commissioners who are fixing the rents of tenants in Ireland. A committee of the Lords, after investigation, consider that the valuers and other officials employed by the Irish Court should have received instructions, or, in other words, that there should be a standard, and normal values fixed beforehand; and their Lordships adopt the statement of Professor BALDWIN, one of the sub-Commissioners, that it was "a frightful thing to let them loose on the property of landlords and tenants without instructions." The Commissioners, on the contrary, say it is impossible to communicate to others, in the form of principles, that kind of knowledge which is only to be acquired by personal experience and skill. A quasi-scientific form was devised by the late Sir RICHARD GRIFFITH when he organised the Government valuation system in Ireland, and the Lords may desire to have something of the kind for the Land Act valuers. But it is absurd to suppose that there can be a system by which difference of opinion is an impossibility. If their Lordships would glance over the evidence of the surveyors on any railway property case in London, they would find that the ablest men in the profession frequently differ about the value of a house or a set of chambers.

THE fruitless competition for the Dublin Museum has cost the country 1,555*l.* 15*s.* 1*d.* The five architects who took part in the second competition have received 1,450*l.*, and the remainder was spent on expenses connected with the exhibition of the designs in the Shelbourne Hall. Nails must be costly in Ireland when it requires 105*l.* to hang a few drawings. It has been generally supposed that the failure of the competition was due to the circumstance that the five

architects happened to be Englishmen, but the official explanation could not well recognise the facts. Another reason is therefore given for the Government concession to insular prejudices, namely, that "a strong desire was expressed by the representatives of the various departments that a change should be made in the contemplated arrangement." The representatives were engaged for several years considering the details of the proposed museum, and it is strange to find them suddenly desiring a change in their own arrangements as soon as they saw the five plans.

THE fortieth annual congress of the British Archaeological Association is fixed to be held at Dover, under the presidency of Earl GRANVILLE. An opening meeting will be held at the Town Hall on Monday, August 20, when Lord GRANVILLE and the members of the Association will be formally received by the Mayor and Corporation, who will entertain them at a public dinner the same evening. Tuesday will be spent in a visit to Deal, Sandwich, Richborough Castle, and Walmer Castle; Wednesday in visits to Westenhanger, Fair Rosamond's Bower, Lynne Castle and Church, Saltwood Castle, Hythe, and Caesar's Camp between Dover and Folkestone. Thursday and Friday will be devoted to Canterbury, when the cathedral and several of the most interesting churches will be visited, together with St. Augustine's Abbey, and whence excursions will be made to Bekebourne, Patrick'sbourne, and Barfreston. On Saturday the members of the Association will visit the Templars' Church on the western heights of Dover, and they will be subsequently conducted over Dover Castle. In the evenings, papers on subjects connected with the congress will be read at the Town Hall. The first three days of the following week will be regarded as "extra days," and will be devoted to visits to the ancient town of Calais.

"SEPARATE ESTATES" occasionally cause trouble in building accounts. Some time ago a builder in Hadlow carried out work for a lady, and his bill amounted to over 200*l.* But his solicitor was informed that the claim was chargeable to the lady's separate estate, which was inadequate to meet the amount. It was discovered that, in addition to about 1,000*l.* a year, there was also a sum of 5,000*l.* in the 3 per Cents, which was available, although this was denied. In spite of the efforts of counsel, who said the claim was only a "do," the jury found for the builder, and they expressed a regret that they could not also add interest.

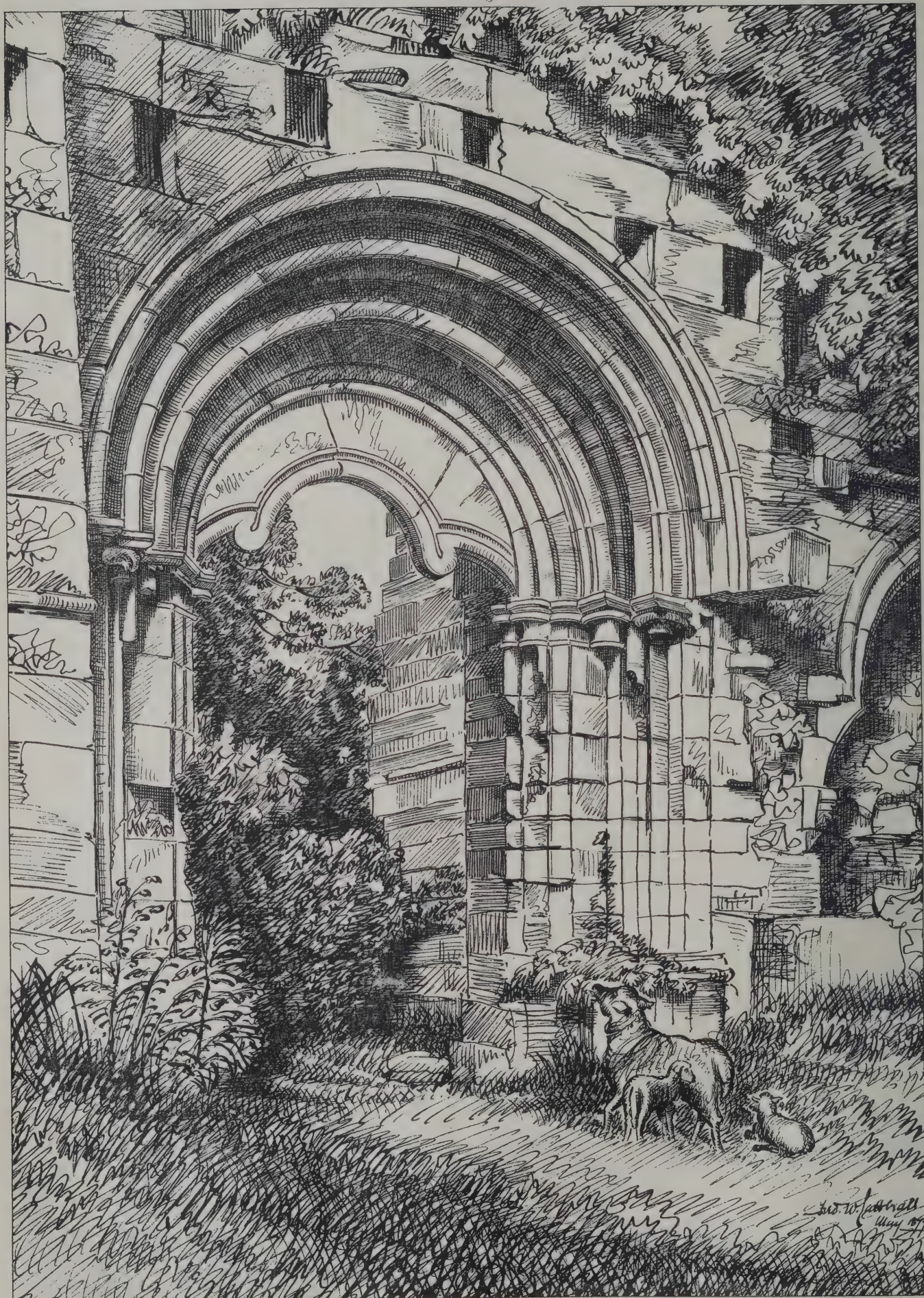
AN inscription which is on one of the bronze figures of crabs that originally supported the Egyptian obelisk in the Central Park of New York, has been deciphered by Professor MERRIAM, of Columbia College. According to it, the obelisk was erected by the architect PONTIUS, under the direction and auspices of PUBLIUS RUBRIUS BARBARUS, probably in the year B.C. 13-12. PONTIUS was an Athenian by birth, and having transported two of the obelisks of Heliopolis to Alexandria for BARBARUS, the first experiment of the kind under the Romans, he is conjectured to have been afterwards engaged to transport two others to the Capitol. There is also some reason to think that he was a friend of MECÆNAS.

THE Commissioners of Public Works in Ireland have advanced a good deal of money during last year for building. There were twenty-eight applications under the Labouring Classes' Lodging-Houses and Dwellings Acts, amounting to 47,821*l.*, for the erection of dwellings for 470 families; loans for the accommodation of 270 families, and amounting to 21,187*l.*, have been granted. Of those not sanctioned some few have been rejected, the title of the applicants not coming within the requirements of the Act under which such loans are made, some in consequence of the class of buildings proposed not being suitable for dwellings for the labouring classes, whilst the remainder are under consideration. The advances during the year have amounted to 10,908*l.*, and the total amount advanced under these Acts has been 118,421*l.* For the erection of glebe houses 18,441*l.* were granted. Since 1870 the grants under this Act have amounted to 324,960*l.*, and it is remarkable that one-half of the loans were to Roman Catholic clergy. The sum of 6,803*l.* has been granted for the erection of residences for the National School teachers, and 4,780*l.* for dispensary houses.









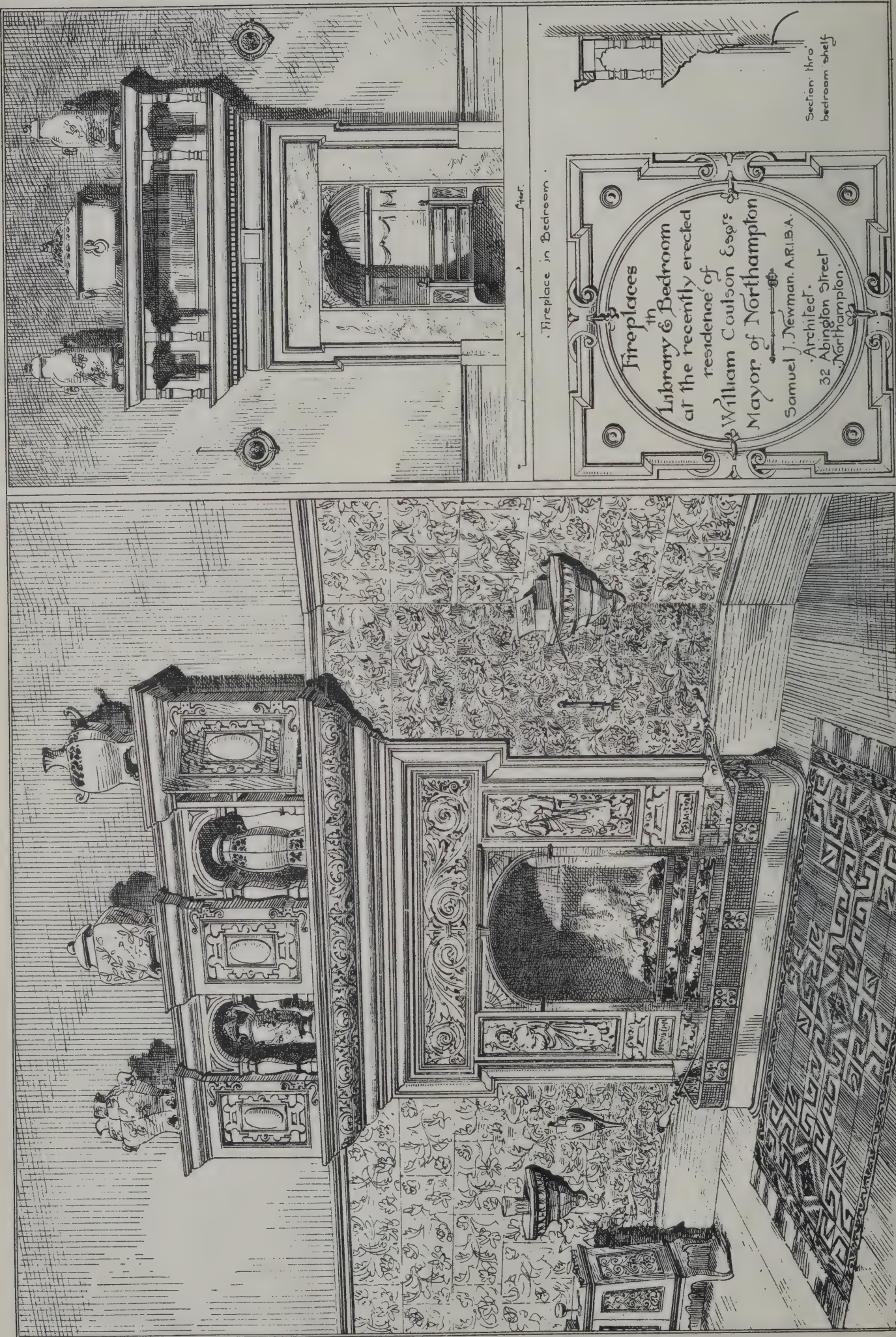
DOORWAY, RIEVAULX ABBEY.

DRAWN BY F. W. CATTERALL.









Fireplace in Bedroom .

Section thro' bedroom shelf

Fireplaces  
in  
Library & Bedroom  
at the recently erected  
residence of  
William Coulson Esq<sup>r</sup> &  
Mayor of Northampton  
Samuel J. Newman, A.R.I.B.A.  
Architect.  
32 Abington Street  
Northampton.







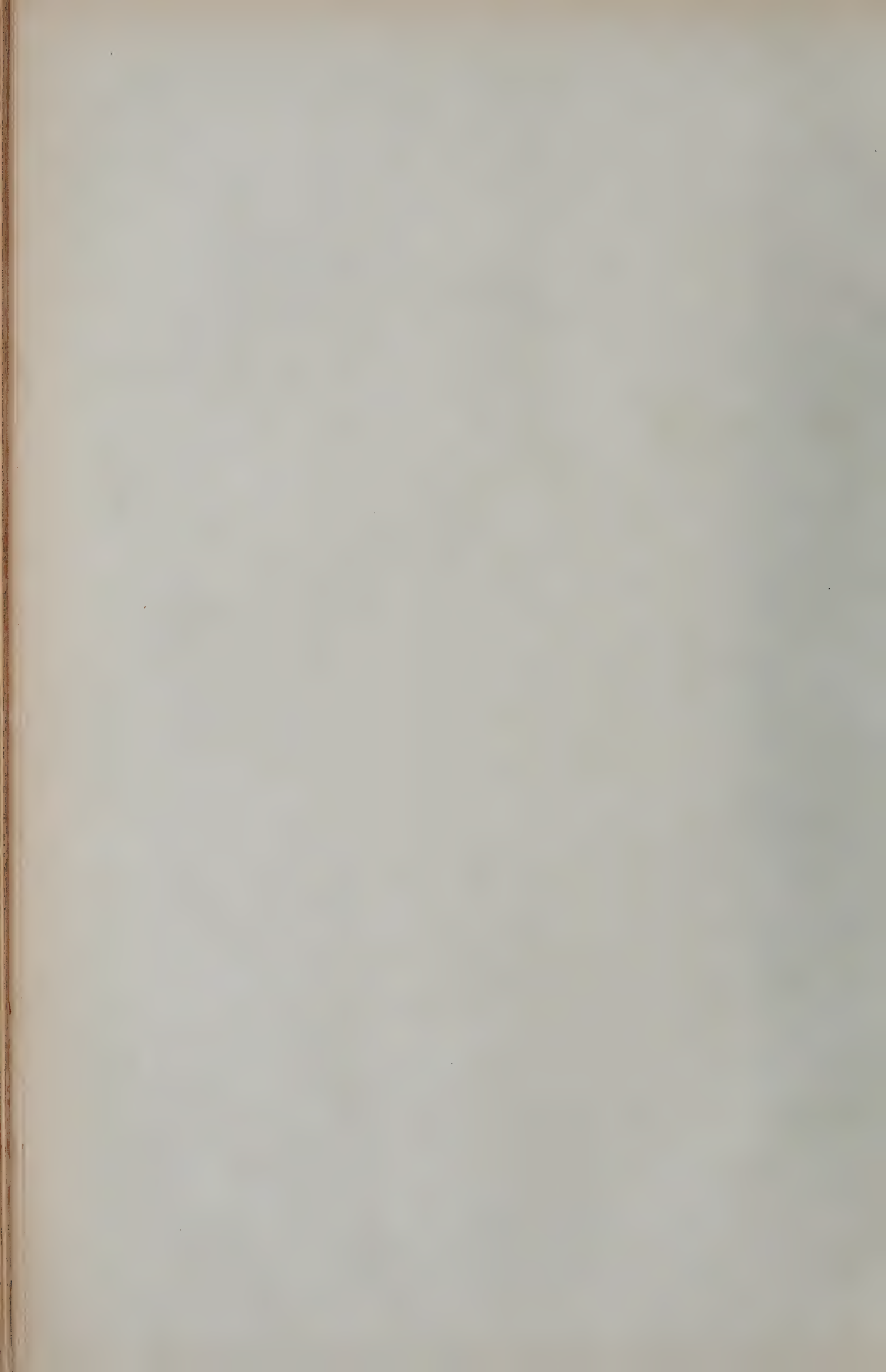
*Russell Chambers*  
*Bury St. W.C.*  
*W. Beckham, Witherington*  
*F.R.I.B.A.*  
*Architect*  
*79 Mark Lane E.C.*









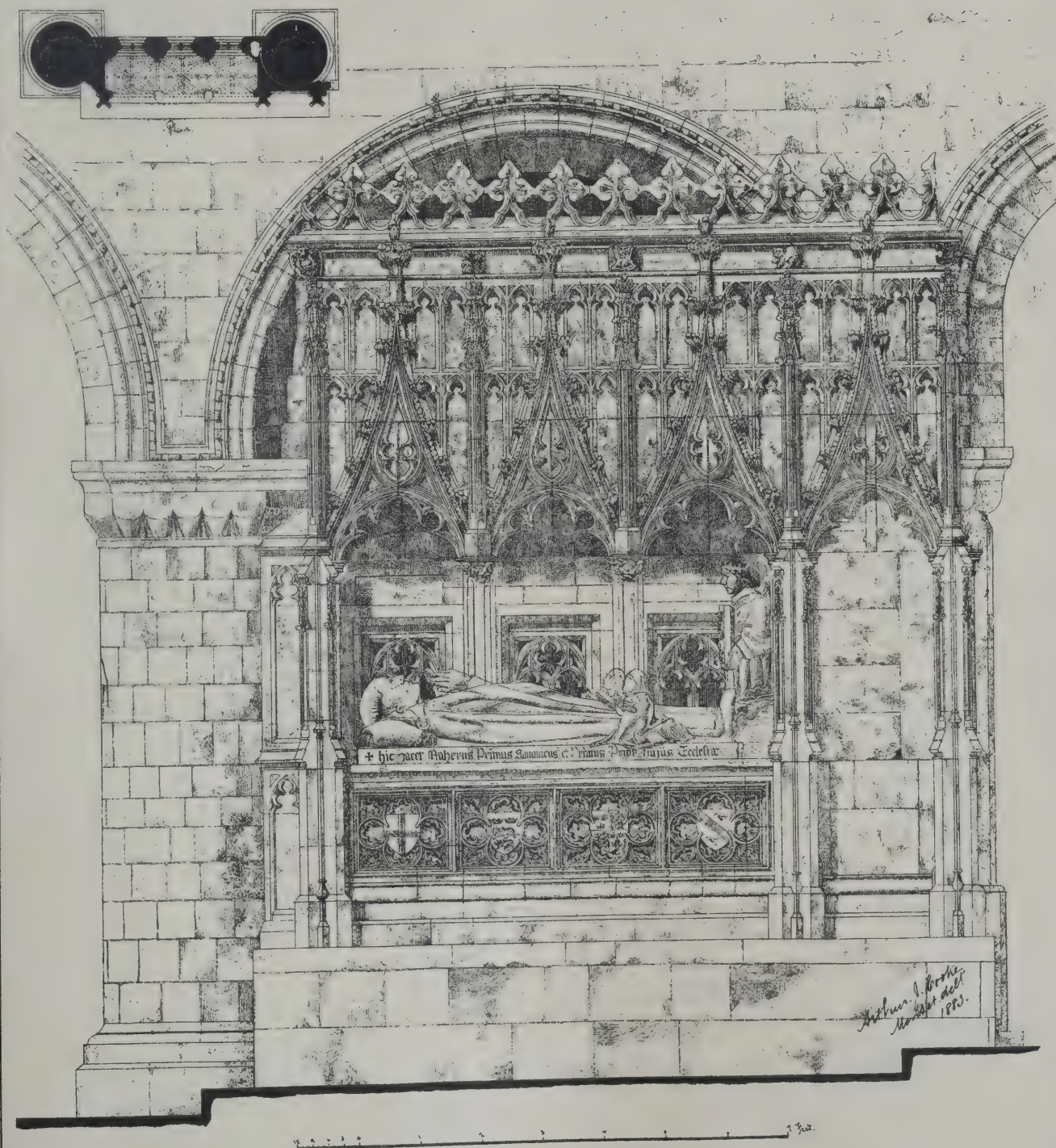




# The FOUNDERS' TOMB

ST. BARTHOLOMEW THE GREAT

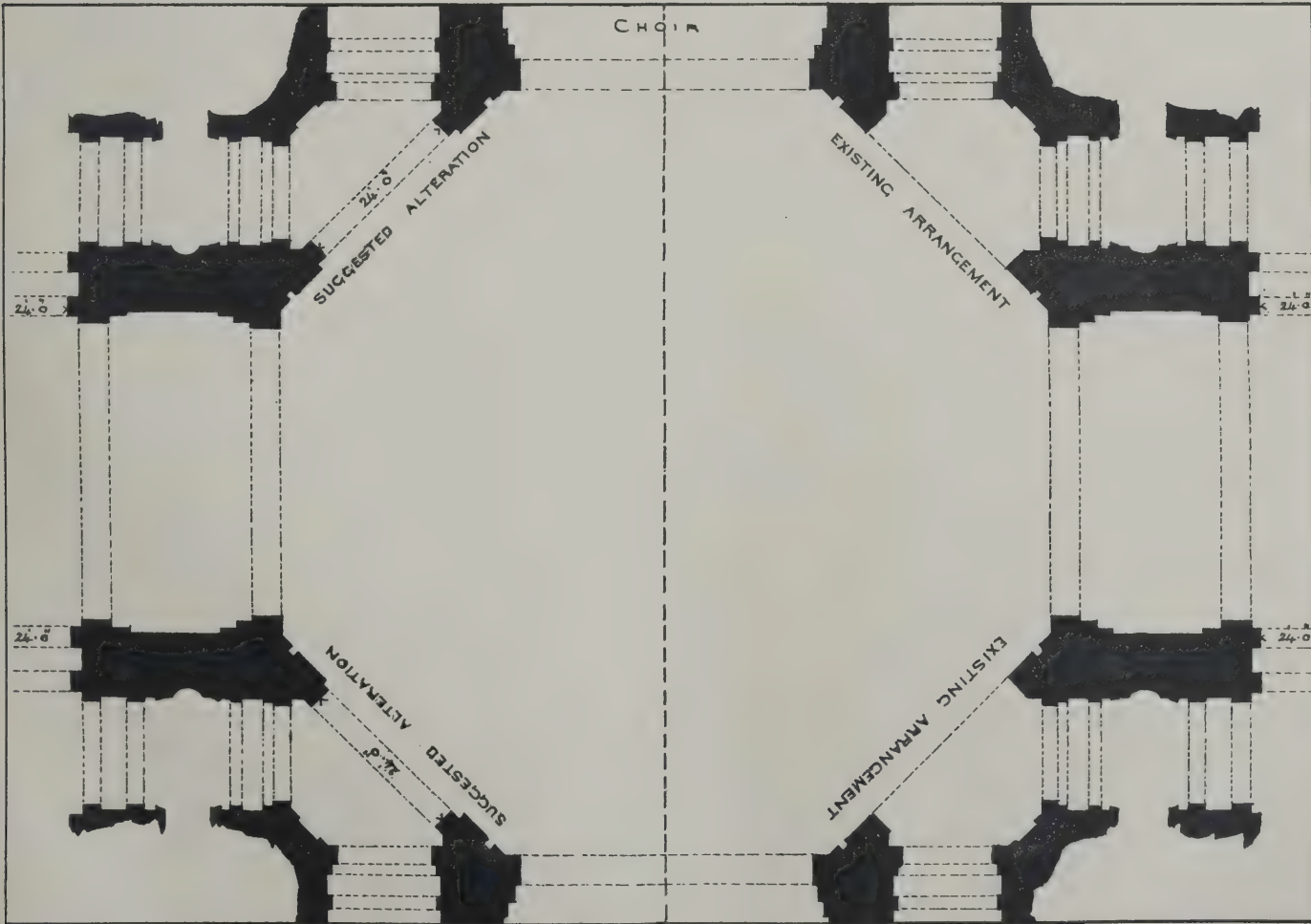
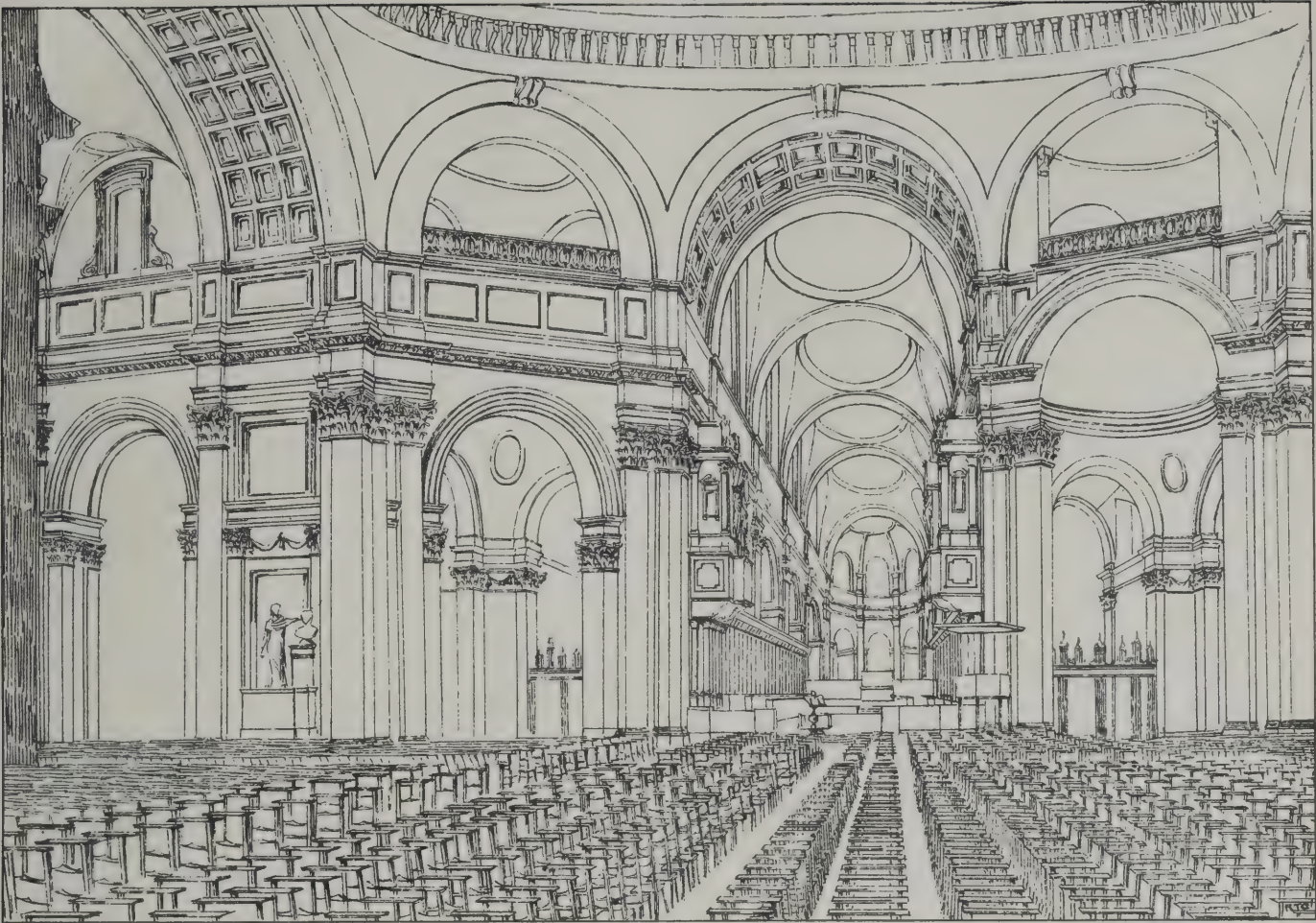
SMITHFIELD.











Sprague & Co. 22, Nassau Lane. Cannon St. EC

SUGGESTED ALTERATION OF SEGMENTAL ARCHES, ST. PAULS CATHEDRAL.  
By ROGER T. CONDER.







## ILLUSTRATIONS.

RUSSELL CHAMBERS, BURY STREET, OXFORD STREET.

THESE buildings are in course of erection at the corner of Bury Street, Oxford Street, for Messrs. SANDON BROS., from the designs and under the superintendence of Mr. W. SECKHAM WITHERINGTON, F.R.I.B.A., 79 Mark Lane, E.C. The floors and roof have been constructed on their fireproof system by Messrs. DENNETT & INGLE.

FIREPLACES, IVY DALE, NORTHAMPTON.

IVY DALE was erected last year for Mr. W. COULSON, mayor of Northampton, the architect being Mr. S. J. NEWMAN, A.R.I.B.A. The library fireplace is executed in American walnut-wood. The jambs and frieze are slightly different from the design shown, and were executed in WILCOCKS' faience of a light apple-green colour, glazed; and the hearth is of tiles to match.

The bedroom fireplace shown is executed in pitch pine. At the back the three panels are filled with bevelled mirrors. The jambs and frieze round the grate are of green serpentine. The woodwork of these chimneypieces, as also all the other fittings in the house, was well done by the contractor for the erection of the house, Mr. G. HEAP.

SUGGESTED ALTERATION OF SEGMENTAL ARCHES OF ST. PAUL'S CATHEDRAL.

(See article by Mr. R. T. CONDER, on page 47.)

DOORWAY, RIEVAULX ABBEY.

THE FOUNDER'S TOMB, ST. BARTHOLOMEW THE GREAT, SMITHFIELD.

THIS beautiful example of Perpendicular work is situated in the north-east corner of the Priory Church of St. Bartholomew, the choir of which, forming the present church, alone remains.

The tomb is supposed to have been erected about the fourteenth century, to the memory of RAHERE, the founder of the priory, who, having seen a vision of St. BARTHOLOMEW commanding him to build a priory, selected a waste and marshy piece of ground in Smithfield, thus exemplifying Isaiah li. 3, a Latin version of which is inscribed on the books borne by the two small figures on the tomb.

The following account of the founding of the priory, taken from "Stow's Annales of England," may not be uninteresting: "This yeere (1102) the Priorie and hospital of S. BARTHOLOMEW in Smithfield was begun to be founded by RAHERE (a man of a singular and pleasant wit, and therefore of many called the king's jester and minstrel), in a place which before had been a marish ground, a common laistaw of al ordure and filth, and the place where felons and other transgressors were executed. This RAHERE joyned unto him a certain old man named ALFUNE, that had (not long before) builded the parish Church of S. Giles nigh a gate of the citie of London, then called Creeplegate: this man he used as a Counciller and companion in his building of the Church and Hospital, and the one of them, to wit, RAHERE, became the first Prior of that priorie, and the other, to wit, ALFUNE, became hospitaller or proctor for the poore and went himselfe dayly to the Shambles, and other Markets, where he begged the charitie of devout people for their reliefe, promising to the liberall givers (allading testimonies of holy Scripture) reward at the hands of God."

## SOCIAL SCIENCE ASSOCIATION.

THE annual business meeting of this Association was held on Tuesday, the retiring president, Mr. Hastings, M.P., in the chair. A report from the Council detailing the action taken by the Association during the twelve months ending June, was presented and ordered to be received and circulated.

The following appointments in the Association for the ensuing year, 1883-84, were then made: President, Sir Richard Temple, Bart, G.C.S.I., C.I.E., D.C.L., LL.D., late Governor of Bombay; Presidents of Departments: I. *Jurisprudence*: Mr. Wm. Barber, Q.C., Professor of Law of Real and Personal Property at the Inns of Court; II. *Education*: Mr. Francis Sharp Powell, M.A.; III. *Health*: Mr. T. Pridgin Teale, M.A., F.R.C.S.; IV. *Economy and Trade*: Mr. J. E. Thorold Rogers, M.A., M.P.; *Chair-*

*man of Repression of Crime Section*: Mr. C. H. Howard Vincent, Director of Criminal Investigations. Mr. Hastings, M.P., was elected a permanent vice-president of the Association; and, retiring from the presidency of the Council—a position which he had held since the death of the late Lord Brougham, in 1868—the appointment of his successor was left in the hands of the Council. Mr. Westlake, Q.C., LL.D., and Mr. Joseph Brown, Q.C., were re-appointed as Foreign Secretary and Treasurer; and Mr. Andrew Dunn and Mr. Andrew Edgar, LL.D., were the re-elected Auditors. The following were appointed Hon. Secretaries of Departments: I. *Jurisprudence*: Mr. H. N. Mozley, M.A., and Mr. Meryon White, M.A.; *Repression of Crime Section*: Mr. Herbert A. Safford; II. *Education*: Mr. Rowland Hamilton; III. *Health*: Mr. H. H. Collins and Dr. Seaton; IV. *Economy and Trade*: Rev. S. A. Steinthal, and Mr. Edward J. Watherston; V. *Art*: Mr. Philip H. Rathbone and Mr. Arthur H. Mackmurdo.

The proceedings terminated with the election of the various Standing Committees of Departments and hearty votes of thanks to the officers for their services during the past year.

The Congress, this autumn, is to be held at Huddersfield, from October 3 to October 10.

## DONATELLO AT THE SANTO AT PADUA.

IN the history of Italian art, says a correspondent of the *Times*, which for centuries was a sequence of triumphs and advancement, there stand out periods of more than ordinary activity, when the advance seems rather to have been made in leaps and bounds. These brilliant epochs were naturally the result of the advent of some artist of more than ordinary genius, and are often associated with some particular spot, usually a church. From thence art received a fresh impulse, the old forms that were perhaps commencing to crystallise were cast aside, and as long as Italian art retained its vitality the process was continually in action, not the least remarkable fact being the duration of this recuperation. Such points of departure are the Arena Chapel at Padua, the Brancacci Chapel in the Carmine at Florence, and others in various parts of Italy; but in the series there is perhaps none bearing higher interest, both for its intrinsic character and extended influence, than the high altar of the Santo at Padua, or rather, it should be stated, what was the high altar, for of the bronzes which decorated it only a part remain as Donatello left them, the rest being now scattered about the church. The occasion of the acceptance of the commission by Donatello arose from his being at Padua to execute the statue of Gattamelata. At the death of that celebrated *condottiere* the Venetian Senate decreed that a public monument should be erected in his honour, and Donatello, as the foremost sculptor of the time, was engaged for the work. An equestrian statue of such importance necessitated for the artist a lengthened residence on the spot—he seems to have stayed at Padua from 1474 to 1483—and being there the citizens would naturally be desirous of securing some of his work for the adornment of their principal church. The statue itself, which stands in the piazza in front of the church, was a striking success. It remains now second to none of its kind, either antique or modern. In contemplating it, the *Marcus Aurelius* of the Capitol and the *Colleoni* of Donatello's celebrated pupil arise in the mind, but the sense of command and authority in the general, the life-like presentation of the horse, the perfect unity of action of the two, the bold, clear lines of the composition, its severe restraint, and the consummate execution of every part, may claim for it the palm, even when brought into comparison with its two celebrated rivals.

The high altar of the church gave Donatello the widest scope for the display of qualities that he judged right to keep in abeyance in the statue. In this his aim seems to have been to accentuate the feeling of latent power. Beneath the simple gesture of authority we are made sensible of the possession of a force that might burst forth into fiery action. No such need of restraint was necessary in the bas-reliefs and statues of the altar. There the emotions might have free play, and there Donatello, the great master of dramatic expression, gave full course to his inexhaustible imagination. The decoration of the high altar was originally composed of four large bas-reliefs, representing the miracles of St. Antonio; twelve panels of angels singing and playing musical instruments, two bas-reliefs of the Man of Sorrows, with a life-size crucifix and statues of St. Antonio and other saints, also in the round, the whole being in bronze. Now the crucifix and the statues are placed at a great height in the church, they may also be said to be out of reach of observation, and two of the large bas-reliefs, with a dead Christ and a couple of the panels of angels are inserted in the altar of the Chapel of the Sacrament; the symbols of the evangelists, executed, probably, by Donatello's pupils, are in the choir. The portion remaining in its original state in the front of the high altar, has in the centre a Man of Sorrows, and on either side compositions of the Miracles, with panels of angels at the angles. In no respect has Donatello shown greater skill than in the treatment



of the Miracles, which all, saving one, are as subjects puerile to the last degree. There can be little question of the feelings which arise in the mind at the narration of legends like that of the hungry ass who went on his knees when St. Antonio presented the Host before him; of the new-born infant finding speech to testify to the innocence of his mother, falsely accused of infidelity; or of the saint making whole the leg of the young man who broke it in kicking his mother. The last of the four—an illustration of the text, "Where your treasure is there will your heart be also"—is in itself a really fine subject, and in Donatello's hands it receives worthy presentation. In the centre of a Florentine palatial interior stands a bier with the dead body of the rich miser stretched upon it; the saint gives orders that the breast be cut open; this is being done by the surgeons, and the cavity is discovered to be empty. Crowds press round, regarding the operation with eager curiosity and horror. The persons nearest the saint fall on their knees, one kisses the ground where he has trodden. Naked children run in terror to their mothers, who fold them in their arms. On the left a group is seen round an iron-bound money chest, which they have forced open, and there, bedded in his treasure, is found the heart of the miser. The figures in this and the other larger compositions are about eight or nine inches high. Beside the miracle of the miser on the high altar is that of the unfilial-mannered youth. The ruffian is rolling in agony on the ground, people hold his hand, and otherwise betray an interest and commiseration for his condition which he would scarcely receive in northern lands. The saint kneels down and clasps the offending member in both hands. Here, too, groups of figures in eager converse surround the principal actors. The background represents a quadrangle, with seats rising from a raised platform. Between these compositions is a Man of Sorrows, a dead Christ seated on a throne, with angels around Him. It bears a strong resemblance to the central figure of a similar subject which was exhibited at Burlington House two years ago, and then attributed to Mantegna. The three panels with two smaller ones of singing angels are let into the warm white marble, having a plinth of red Verona marble and a moulding of the same at the top; great bosses of bronze stud the surface at the corners of the plaques. In the backgrounds of the composition there is a considerable amount of gilding of the thick antique sort, that looks like gold plates. Here and there the dark bronze figures relieve off this dulled gleaming surface; or again, as in the backgrounds of the angels, there are passages of the most minute and exquisite diapering, fine and delicate as *niello* work. So that, seen from a sufficient distance for the eye to take in the whole effect, and regarded only as colour and the decorative disposition of masses of light and dark, this altar front displays a depth of imaginative conception second only to the purely sculptural qualities of the compositions themselves.

The subjects on the altar of the Sacrament are the testimony of the ass and of the new-born infant. The former takes place in a church which has three grand arches of early Renaissance architecture. The saint stands on the altar steps and presents the Host to the ass, who kneels before it. Some of the heretics in the church are already convinced, others still question and doubt. The latter subject has St. Antonio in the centre, who takes the babe in his hands. A crowd of women on the right fiercely denounce the supposed culprit. One fierce virago, with naked breasts, extends her arm. Two hags have thoroughly made up their minds on the matter. Some of the women scrutinize the countenance of the saint; all are violently excited. We seem to hear their shrill, sharp, accusing voices. It will be noted that by a satirical touch the artist has made the accusers of the same sex as the accused. She herself kneels with folded arms at the feet of the saint. On the right stands a group of men and youths in short jackets, tight hose, and Florentine *birette*, with daggers at their girdle. These evidently rejoice at the fortunate termination of the case. A graceful figure of a peasant girl smiles as she turns away on her errand. Throughout the compositions the eye is arrested by these single figures, grave or graceful, that stand out from the surging, swaying, or kneeling crowds, serving as special points of attraction, while perfectly harmonising with the general action. Between the last two miracles is placed a dead Christ between lamenting angels; they are of the same type as those in the smaller panels, and serve as a fine contrast to their fellows, who accompany their songs of praise with lute, or pipe, or cymbals. The head and torso of the Christ is, both for sentiment and execution, in Donatello's finest manner; the gradation and sense of actuality rendered in such low relief being a triumph of modelling. Those acquainted with the Berlin Museum will at once recognise the source from which Giovanni Bellini has taken the motive of his dead Christ.

In a different material to the above-mentioned works, and perhaps even displaying greater force of imagination, is the bas-relief in terra-cotta of the Entombment. The dead Christ is being reverently laid in the sepulchre, while Mary and the disciples are overwhelmed with grief and despair. Their sorrow finds vent in cries of anguish and gestures of despair which rend the heart. Donatello here strikes one of his profoundest chords of tragic expression; indeed, it may be asserted that in few examples of plastic art are the emotions more deeply stirred than in these few

square feet of burnt clay. In tracing the development of artistic motives remarkable affinities are sometimes observed, and it can scarcely have been pure hazard that determined a certain likeness of composition and sentiment between this panel and Sir Richard Wallace's superb drawing of the death of Gattamelata by Polaiuolo. The forms of the latter master had not Donatello's breadth and movement, nor was his inspiration on as high a level, yet it was of the same order, and it is impossible to resist the notion that the masterpiece of Hertford House owes its origin to the terra-cotta of the Santo.

## THE SCIENCE AND ART DEPARTMENT PRIZES.

THE Lords of the Committee of Council on Education have by a recent minute decided to withdraw the prizes hitherto given to candidates in the science examinations who obtain a first-class in the elementary stage of the various subjects of science, substituting certificates of merit, and retaining only the prizes given in the advanced stage. The money hitherto devoted to prizes will be employed in providing for thirty-six national scholarships—twelve each year—which will be offered in competition to students of the industrial classes, and awarded at the annual examinations of the department. The national scholarship will be tenable, at the option of the holder, either at the Normal School of Science, South Kensington, or at the Royal College of Science, Dublin, during the course for the Associateship, about three years. The scholar will receive 30s. a week during the session of about nine months in the year, second-class railway fare to and from London or Dublin, and free admission to the lectures and laboratories. It is understood that a corresponding alteration will be made in respect of the prizes in art schools.

## IRISH ECCLESIASTICAL ANTIQUITIES.

DURING the past year the Commissioners of Public Works in Ireland have carried out works under the direction of Mr. T. N. Deane, R.H.A., on the following "National Monuments," viz., Rosserk Abbey, Co. Mayo; Quin Abbey, Co. Clare; Creevelee Abbey, Co. Leitrim; Killala Round Tower, Co. Mayo; Banagher Church, Co. Londonderry; Inchcleraun Churches, Abbey, &c.; Athassel Abbey, Co. Tipperary. The cost of the works has been about 4,000*l*. In his reports Mr. Deane gives some interesting information respecting the buildings.

The interesting abbey of Rosserk, situated upon the Moy, near Ballina, was, he says, in a most ruinous condition; the walls in many places were on the verge of falling, the tracery of the eastern window had disappeared, but a careful examination of the *débris* produced all the missing stones. These were reset in their original position, thus reproducing an excellent example of fourteenth-century tracery. The tower, a bold piece of construction, is about 15 feet square by 60 feet high, is carried on two arches, which divide the nave from the choir; the soffit is carefully groined. In the tower is an apartment which is entered from a door considerably above the level of the roof of choir; this apartment may have been used as a cell or "domus inclusi."

The plan of the abbey consists of nave, 45 feet by 18 feet; chancel, 33 feet by 18 feet; south transept, 32 feet by 20 feet. On the north are conventual buildings, two storeys in height. To the south of the high altar is a double piscina, the spandrels of the arches are carved with figure sculpture, and the recess groined. In the southern transept there is a curious confessional.

The walls of the buildings have been secured and pointed, the arches over conventual buildings have been coated with cement concrete, the tower has been pointed and missing stones supplied, the tracery of windows replaced and secured, and bars have been put in some of the opes to prevent trespass; gates also have been put to western doorway.

The works at Quin Abbey are now finished. They were of an extensive nature, and consisted of pointing, rebuilding dangerous portions of walls and arches, cement coating on vaultings, clearing out cloisters, readjusting tombs.

Some repairs have been done to the ancient church adjacent to the abbey, which dates from the thirteenth century. At the eastern end are three lancet windows; the buttresses have fine mouldings. The walls have been partially pointed, the tops groined, and the buttresses underpinned.

Creevelee Abbey was founded for the Franciscan Order, A.D. 1508, by Margaret O'Brien, daughter of Lord O'Brien, and wife of Eugene Lord O'Rourke. In the village of Dromahaire is the manor-house of the O'Rourks, a good example of Tudor architecture. The abbey in many respects resembles that at Sligo; it consists of nave, south transept, tower and choir, refectory, and other conventual buildings. A descendant of the founder of this abbey, and probably the builder of the manor-house, was an active rebel in 1588. He submitted, and went to London to be introduced to Elizabeth, but, refusing to bend his knee to the queen,



and declining life or pardon, simply requested to be "hung by a withe, according to the custom of his country"—a request, as the chronicle states, readily granted.

The following are the general dimensions of the abbey: Nave, 60 feet by 19 feet; choir, 40 feet by 19 feet; transept, 40 feet by 19 feet; and cloister garth, 45 feet by 55 feet. The conventual apartments contain refectory and library. The character of the architecture corresponds throughout with the date ascribed to the foundation.

The cloister garth has been excavated, and nearly the entire of the arcade arches have been found. These correspond in detail with those at Sligo Abbey. Large gaps in the wall have been rebuilt; the tracery of the windows has been secured; missing portions, when found, have been replaced. The entire tracery of the western window was found and reset. Tombs have been levelled, and it is hoped that steps may be taken to prevent the desecration of the abbey by the overcrowding of graves, which at present is carried on to an extent injurious to health and disrespectful to the church.

Athassel Abbey is probably one of the most interesting abbeys in Ireland, of great extent, and truly worthy of being classed as a national monument. It was founded by William Fitz Adelen de Burgho, for canons regular of the Order of St. Augustine. The De Burghos, it is recorded, were great benefactors to this abbey, and it was a considerable structure in 1202. Mr. Deane, however, is disposed to fix the date of the main building at 1260. The dimensions of the church are very large in comparison with others in Ireland, viz.: Nave, 121 feet by 57 feet 10 inches; choir, 79 feet by 27 feet 6 inches; transept, 30 feet 8 inches by 28 feet; and cloisters, 85 feet by 89.

The main church, with its transepts and choir, is thirteenth-century work of a good type. To the north of the western entrance are the remains of a large tower. Towers are very rare on Irish churches at so early a date, and the position of this one is very peculiar. To the south of the entrance is a small chapel carefully groined from vaulting shafts. Little remains of the pillars of the nave, but it must have been divided into six bays; the space between the vaulting shafts being 21 feet, from the remnants of these shafts which have been found. The choir was separated from the nave by a wall from top to bottom, with a beautiful central doorway, an illustration of which is given; at either side were niches for statues. Above the central entrance was an open archway, which probably corresponded with the rood screen.

On entering the choir, to the right and left are the transept arches, 27 feet span by 46 feet to the apex of the arch; the mouldings of the piers are simple and bold. The choir arch was 21 feet 3 inches span. In 1329 Brian O'Brian burnt Athassel to the ground. At that time it is probable the transept arches and choir were seriously injured. This portion of the abbey was utilised for domestic purposes of a semi-military character. Walls were built within the space enclosed by the transept arches, this space being vaulted in a single span; the transept arches were raised upon, and the upper portion was used as a dwelling. The approach to these apartments was a passage along the top of the transept wall, entered by a circular staircase in the south-east angle of transept.

The choir of the church is lighted by the side windows and eastern window of three lights, the latter fifteenth century tracing; the parapet was stepped. The extent can be traced of the first church, which consisted of nave, north-west tower, south side chapel, choir and transepts, with conventual buildings in continuation of south transept. The total length of the conventual buildings was 87 feet 10 inches. The cloister was enclosed by walls, and entered at the south-west corner. Mr. Deane doubts that the early cloister garth was arcaded. The present arcade is fifteenth-century work.

The various changes which were made in the early part of the fifteenth century makes it difficult to define with accuracy many points of interest in the original thirteenth-century building. Amongst them may be noted the fact that the bases of the transept arches are at a level of several feet above the church floor. The south transept has no evidence of having had a sub-storey, but it may have been made at a later period. The elevation of the bases tends to support the idea that both transepts had sub-chapels originally. Mr. Deane hopes to be able to satisfy himself on this point during the works at present in hand. The remainder of the conventual buildings in connection with the abbey church are all of fifteenth-century date, and do not present any particular features of interest. The choir contains many interesting effigies and monumental stones, one of the former probably Walter, Earl of Ulster. The memorial-stone with two figures is peculiar.

Beyond the abbey church and its immediate surroundings, and separated by intervening land, there is a strong wall and out-buildings. The abbey lands originally formed an island in the Suir, which was approached by a bridge of three arches leading to the gate-house, which was vaulted, and strongly defended by lifting gate or portcullis.

Banagher Church, formerly called Beaunchar, or The Horns, is a curious and early structure. It consists of nave and chancel, the former 35 feet by 20 feet, the latter 20 feet by 11 feet. The western doorway is square-headed, with inclined sides. The

founder of the church, St. Muirdach O'Heney, who lived A.D. 1121. In the graveyard surrounding the church are many inscribed slabs of early date, and others of the sixteenth century, bearing the names of old families in the county, amongst these many of the O'Heney's. The tomb of the founder, which is an oblong structure 12 feet by 6 feet, with gabled stone roof and effigy of the saint, has been repaired lately, and is in good condition.

The ruins of Inchcleraun Churches and Abbey are of very early date, particularly the church with the square tower at western end, referred to in Petrie as one of the earliest examples of such a structure. The stones are massive and wrought square. The founder of this church is stated to have been St. Dhiarmuid Naomih, or The Just, A.D. 540. The buildings on the island appear to have been frequently pillaged up to A.D. 1193. At the southern end of the island are the remains of two Romanesque churches, and portions of a conventual building of later date. The works consisted of pointing, repairing broken walls, concreting arches, and generally placing the ruins in a safe condition.

## THE ELECTRIC LIGHTING ACT.

A PARLIAMENTARY paper has been issued containing the report of the Board of Trade respecting the applications to and proceedings of the Board under the Electric Lighting Act of 1882. From this statement it appears that by December 21 last, the date prescribed by the rules which the Board of Trade had issued, 106 applications had been received. Twenty-three of these were promoted by local authorities, and 83 by companies; 97 of the applications related to places in England and Wales, eight to places in Scotland, and one to Belfast, Ireland; 35 related to London and the suburbs. A list of the applications is given in an appendix. A fee of 50*l.* was received with each application, and in ten cases where separate orders have been granted for various districts included in one application an additional fee of 10*l.* has been charged by the Board of Trade. The total amount of fees received amounts to 5,400*l.* The time for lodging objections was limited by the rules to two months from the date of the first advertisement of the application. It was, however, extended by a new rule to February 1. Eventually, after a consideration of the orders as deposited, and of the objections which had been lodged against them, the Board of Trade determined upon the principles upon which the applications should be dealt with, and on February 28 they circulated model clauses for adoption with such modifications as might appear to be necessary. The charges to the public are more than covered by the fees received.

## THE AMENDED PATENT BILL.

THE Patents for Inventions Bill, as amended by the Standing Committee, has been reprinted, ready for presentation to the House. In its new form the part of it relating to patents for inventions shows many important alterations, though in details only, the amendments having scarcely touched any of the main principles of the original measure. The improvements which have been made are for the most part due to the efforts of committees of the Society of Arts, the British Association, and the Institute of Patent Agents, all of which bodies had interviews with Mr. Chamberlain, and were also represented in the Grand Committee by Sir John Lubbock and other members. Mr. Samuelson, Mr. Hindes-Palmer, and Mr. Anderson also were active in introducing amendments.

As regards the method of application for patents no great changes have been effected in the original scheme. Provision is made for joint application by several persons, of whom one or more may be the actual inventor, and the rule that the provisional specification was to contain precise claims has been struck out. The proposed system of examination into applications has been modified in several particulars. The examiners are not to inquire into "subject matter"—that is to say, to report whether the invention is a proper subject for a patent; they are only to see that the proper forms are complied with, and that a proper description of the invention is supplied (strangely enough, the examination into this point is still limited to the provisional instead of being extended to the complete specification). They are, however, to report if they find two applications for protection for the same invention, and in such a case both applicants are to be informed. Provision is made for the keeping secret of the examiner's reports, even in the case of an action at law.

The provisions for opposition to grants of patents are the same as in the original Bill, but opposition is limited to two grounds—(1) that the person opposing has been robbed of the invention; (2) that there already exists a patent for the same invention. It will be noted that this last provision practically opens up the whole question of novelty, and might enable a rival trader to force an applicant to defend the novelty of his invention in its very earliest stages. In the case of a capitalist pitted against a poor inventor it is easy to see the hardship of such a proceeding.



No changes are made in the fees, but an alternative scale is given under which they may be paid annually. This scale is so arranged that a patentee whose patent lapsed at the seventh year period would pay slightly less in annual fees than if he paid a lump sum in advance.

The practice of "racing for the seal," as it is called, that is, the attempt by a later applicant to get his patent sealed before an earlier applicant, and, therefore, effective against him, is clearly done away with in the amended Bill. In the Bill as drafted this was not quite certain.

The question of amendment is treated more liberally than it originally was, rather wider powers being given to the patentee.

A new clause has been introduced rendering patents effective as against the Crown. This, it will be remembered by those who followed the account of the proceedings in committee, was carried against Mr. Chamberlain, and perhaps there are still hopes that this clause will not become law, because no corresponding alteration has been made in the form for the grant of a patent in the schedule. There the rights of the Crown are still maintained intact. The clause itself is similar to one in Sir John Holker's 1879 Patent Bill.

In the section devoted to legal proceedings there is inserted a new clause providing a remedy for groundless threats of such proceedings. In the miscellaneous section also there are one or two fresh clauses. Among these will be found provision for the case of an inventor who dies without applying for a patent, while another subsection instructs the Patent Office to keep on sale copies of specifications of all existing patents. This clause would be improved by the omission of the word "existing," as it is difficult to see why the Office should not resume the practice, discontinued a few years ago, of keeping in print all specifications alike.

The alterations in the governing body of the Patent Office, proposed in committee, were not pressed in consequence of Mr. Chamberlain's opposition, but the various modifications in the system, under which much originally left to the law officers would now be transferred to the Controller, will probably, to a great extent, meet the wishes of those who were anxious that the importance of the department should be secured by investing its head with, as far as possible, an independent authority. The autocracy of the Controller is however tempered by a provision that he is not to exercise his powers adversely to an applicant without first hearing him.

One more provision there is of considerable importance. In case of international arrangements being effected for the protection of inventions, a foreign patentee is to have priority over other applicants if he applies within six months of the date of his foreign application. This rule is, however, only to apply to foreign States with which international arrangements have been made. In all other cases it may be assumed that the legal interpretation of invention will still apply, and that the man who imports an invention at his own cost and risk from the distant shores of France or Holland will still, in the eye of the law, be the "first and true inventor."

There are many other minor alterations, but probably the above include the most important of those dealing with patents.

### ASPHALTE ROOFS.

A SUMMONS was lately taken out by Mr. Thomas Henry Watson, district surveyor of St. George's, Hanover Square, against Mr. Way, of the firm of Langmead & Way, builders, for covering the roof of a flat with asphalt at the house, No. 4 Half Moon Street, Piccadilly. The case was heard before Mr. de Rutzen at Marlborough Street police-court, on the 19th inst. Mr. Watson said that under the 19th section of the Metropolitan Building Act, 1855, the flat or roof over every building must be covered with slates, tiles, or other incombustible materials. He found that a flat at the back of the house, No. 4 Half Moon Street, had been covered by the defendant with asphalt, which, in his opinion, was not a proper covering of incombustible material as the Act required. He had tried a portion of the asphalt in question by holding it in a jet of gas flame, and it had burned and melted, and portions of it had dropped off in a melted state. He considered that with respect to the contingency of fire, asphalt was not a proper roof covering, and that if a fire occurred near an asphalt flat a shower of sparks or burning timber falling on it would set the asphalt covering of the flat on fire, and convey the conflagration to the adjoining premises.

In cross-examination by Mr. Poland, Mr. Watson said it was the first time he had ever taken proceedings with reference to asphalt roof coverings. He was aware the house next door, in Half Moon Street, had an asphalt flat at the back. He had passed those premises; possibly he did not notice it. He had not objected to it, and was not aware that asphalt flats had been largely adopted for roof coverings of late years by the Government, the Admiralty, the Mint authorities, by many local authorities, and then by the Metropolitan Board of Works themselves in blocks of houses erected under the Artisans' Dwellings Act. He

had never adopted asphalt flats; he did not consider them safe from fire. He did not know the chemical composition of asphalt, beyond the fact that it contained bitumen, and he considered that substance highly inflammable. The flat in question was laid in a concrete bed, about 6 inches thick; the concrete, of course, could not burn, but he considered the asphalt over it would. Mr. Poland here handed Mr. Watson a copy of one of Colonel Haywood, the city engineer's reports, with the results of experiments on asphalt as to its non-inflammability, and asked him if he differed from Colonel Haywood. Witness said those experiments were made on Val de Travers asphalt, and that might be correct, but he considered all bituminous asphalt inflammable.

Mr. Poland, in calling witnesses for the defence, said that this was a vexatious prosecution originating in a crotchet of the district surveyor with reference to asphalt generally. If Mr. Watson's contention were true, half the streets and pavements in London were covered with a material which would readily catch fire and spread it through the metropolis; whereas exactly the contrary was the case. Mr. Poland then referred to the "Notes on Building Construction" prepared for students in the Government Department of Science and Art, and under the heading "Asphalt" read the following description: "Patent asphalt is waterproof, fireproof, easily applied, and to some extent elastic."

Mr. D. Cubitt Nicholls said he was the architect to the premises in question. The drawings of the house showing the flat were sent to Mr. Watson, as district surveyor, before the works were commenced. The flat was a concrete one, and the asphalt laid over it. By no possibility did he consider the flat could communicate fire. If a fire spread to it, and the portion of the building adjacent caught fire, he considered it would help to put it out. He had laid a large number of asphalt flats, and had found them always successful. In cross-examination, witness said he considered asphalt a far better fireproof covering than lead. Lead would melt if hot burning timbers fell on it. The melted lead would set the boarding under it on fire, whereas it was impossible for concrete flats to burn, and asphalt would not run sufficiently to carry fire with it, but when melted would form a putty, which would put out fire. He considered asphalt on concrete far more fireproof than slates over boarding.

Professor Atfield, F.R.S., said he was professor of chemistry to the Royal Pharmaceutical Society. He had tested and analysed various sorts of asphalt in every way. All descriptions of asphalt contained a certain proportion of bitumen; and this bitumen, if extracted from the asphalt, would burn, but asphalt itself would not burn, as the proportion of bitumen it contained was too small to make it inflammable. No asphalt could be used to cover pavements if it contained more than 10 per cent. of bitumen, and it would not lay properly, even if of the commonest description. All asphalts contained at least 90 per cent. of earthy matter; such material would not only arrest fire, but put out flame far better than water. In cross-examination, witness said in any case it was impossible for asphalt to become a fire-conveying material. It was quite true that if a piece of ordinary trade asphalt was held in a jet of gas flame, and surrounded by it, as Mr. Watson had tested it, while so held in the flame, the bitumen in the asphalt would melt and run out of it and burn, while the gas jet was impinging on it, but the moment the gas flame was turned off the flame around the asphalt would cease—the asphalt itself would not burn, there was far too much earthy matter in it to allow it to do so. He considered asphalt flats far safer than either lead slates or tiles, and it was impossible for them to burn when the asphalt was laid on concrete.

Mr. Penrose, architect to the Dean and Chapter of St. Paul's Cathedral, said he had used asphalt to cover roofs in several cases, in one instance in Mr. Watson's district. Mr. Watson did not then object to it; he had used it for the roof over the choir rooms and schools connected with St. Paul's Cathedral. He considered concrete roofs covered with asphalt the best fireproof roofs that could be used. In cross-examination Mr. Penrose said he should not use it for the dome of St. Paul's Cathedral. He considered it good for flats, not domes. He thought it better and more fireproof for roofs than slates.

Mr. Robert Walker, F.R.I.B.A., architect and surveyor, said he had used asphalt for roof flats. In over thirty cases he had found it the very best material for covering roofs that could be used, for the purpose of preventing the spread of fire. He had never known a case where it had conveyed fire, but several instances where asphalt flats had retarded fire. In one case, where a block of cabinet-maker's workshops, built by witness, near Curtain Road, covered with asphalt and concrete flats, had caught fire, there were a large number of frames of cabinet-maker's work stacked on the asphalt flat to a considerable height. These were entirely burnt, and the asphalt on the concrete flat was not melted; had it been lead the building and contents must have caught fire. In another case the fire inside a cabinet workshop burnt itself out, and could not get through the roof, which was a concrete and asphalt flat. Witness, as district surveyor of St. Martin's-in-the-Fields, had a good illustration of the different effect of fire on leaden and asphalt roof coverings from the Alhambra fire. A building, two doors from the Alhambra, was severely injured by the charred and partly-burnt timbers which fell alight on the leaden gutters; that



melted the lead which set the roof-timbers on fire. An asphalte flat on an adjoining house, though the burning charcoal from the fire fell on it, was not burnt through, and the building did not catch fire; the hot charcoal merely melted the asphalte, which formed a sort of putty or soft mass, in which the charcoal became embedded, and the earthy matter in the asphalte, though it was a very common quality of asphalte, choked the flame in the charcoal and put it out.

The magistrate declined to hear any more witnesses, and said that he was clearly of opinion that asphalte was an incombustible material for covering flats within the meaning of the Act, and dismissed the summons.

### SHAKESPERE AND WARWICKSHIRE.

THE members of the Woolhope Club lately visited Stratford-on-Avon. Among other addresses delivered on the occasion was one by Mr. J. Tom Burgess, author of "Historic Warwickshire," and other works.

It had been truly observed, he said, that in this life there was nothing certain but the unexpected, and though it was a common remark by speakers that "they were unexpectedly called upon," it was never more truly applied than on the present occasion, when the Woolhope Club relaxed one of their strictest rules in order that he might say a few words. He should be untrue to himself if he denied that the proposal gave him pleasure, for "out of the fulness of the heart the mouth speaketh," and at the name of William Shakespere thoughts came with a power almost too great for utterance. From his earliest youth he had been a pilgrim at the shrine which has given Stratford a place in history, and many a time and oft he had been "the faithful one amongst the faithful many" at each recurring anniversary of the poet's birthday—St. George's day, be it remembered. The memory of these old-new associations brought home to him the fact that, though Shakespere was born when field-clubs were not, still he had an intense love of nature; he could notice the freckles of a cowslip as well as portray the tempest of passion in the human heart. Their president had quoted to them the eloquent words applied to Her Majesty in "Henry VIII.," and that reminded him that the first queen of bluff King Hal, when discarded and forlorn at the gates of death, called to her maidens and said,

When I am dead, good wench,  
Let me be used with honour; strew me over  
With maiden flowers; that all the world may know  
I was a chaste wife to my grave.

Act iv., Scene 2.

It said something for the rough and passionate soul of Henry that he spared the cathedral of Peterborough—the old minster of The Medehamstead—as a fitting tomb of Catherine of Aragon, his first, if not his best-loved wife. The eye that could see the

Willow growing ascaunt the brook,  
That shows his hoar leaves in the glassy stream,  
and

The gentle ripple kissing every sedge,

could give the world such thoughts, and shaped those thoughts in such language that appealed to every one—which the world cherished as the best and most valued of its literary treasures. The boy Shakespere and "the poet of all time" was no recluse, hoarding sentimental dreams in the cloister or the closet. He was a man of the world, living amongst men and women, observing their foibles and the springs of action, using up as he went along the garnered facts of others, which he polished and set until the rude pebbles became precious jewels. His contemporaries, envious of the fame which he himself seems to have despised, charged him with decking himself out in other men's garments; but they should not forget that the man who digs the clay, makes the bricks, or hews the stone, is not the architect or creator of the fabric in which princes love to dwell, artists admire, and poets love. So it was with the son of the gentle Mary Arden, and frequently he had gone from Snitterfield by the old tumulus at Pathlow to Wilmcote along the road which John Shakespere must have trod when he went courting the yeoman's daughter, who was destined to be the mother of one to whose birthplace they had that day made a pilgrimage. They could imagine the anxiety of that mother when the plague was raging, for the safety of her infant son. They could imagine her pride in his prosperity and fortunes. They could picture forth the stories she told of the deeds her ancestors had done, for it is shrewdly guessed that her grandfather had fought at Bosworth, from the neighbourhood of which bloody field the Shakesperes had migrated. There were passages in "Richard III." which seem to betoken an acquaintance with the detail of the last battle of the Roses, other than what was to be gleaned from books and chronicles, and he may have heard only at second-hand how Richard exclaimed—

Saddle White Surrey for the field to-morrow!

and thus it was that this great genius thought no detail too insignificant, no stupendous thought too grand to be embodied in his

marvellous plays—and in his heartfelt poetic effusions. It had been truly said that whilst he could give Hamlet an everlasting fame, he could remember to leave his wife his second-best bed. It was but right that such a man should be born in the heart of England, and that he should live in the hearts of every English-speaking people. As a Midland man, he was proud to be a loving fellow-countryman. He was proud of having a common lineage derived from the county of his fathers, and when in sickness or in sorrow he wanted his mind diverted and fed full of sumptuous things, he found an everlasting font of immortal words in those books of which the author seemed to have no care in his lifetime. He seemed to have been prouder to be a country gentleman than the author of "Lear." He left his beautiful Ophelia, Cordelia, and Imogen to the casual care of careless printers. He thought more of his barley apparently than his sonnets, and perhaps thought more of his lineage from the old Saxon Earls of Warwick, who are said to have been descended from Alfred himself, than of the queen and heroes—the stalwart soldiers and finest patriots—to whom he had given a lasting name and fame. The subject was a vast and a tempting one. Each gushing thought seemed overtaken by another. He felt that he was trespassing beyond the few minutes allowed him; he could only a

Round, unvarnished tale deliver

off-hand, a simple collation of crude ideas, when he would have liked to have set before them a rich repast. The trees, the hedge-rows, and the meadows bear witness to him. They are the faithful, truest witnesses of his fame, and seem to speak in a low monody—

We shall ne'er look upon his like again.

It had been a great pleasure to him to leave the bustle and toil of London to accompany the members of the Woolhope Field Club by the banks of the Avon, and he trusted that each one would remember with pleasure the day of their pilgrimage to Stratford.

### ANAGNI.

THE first of a series of articles, by Dr. E. A. Freeman, on the country between Rome and Brindisi, has been published in *The Guardian*. It describes the town of Anagni, which is girded by mighty walls. The hill of Anagni, says Dr. Freeman, is not, like the hills of Segni and Norba, an actual piece of the mountain itself; it is a hill, an isolated hill, a hill so large that, no less than at Segni and Norba, the city is wholly on the height; the walls merely fence in the hill-top. That hill-top is in some parts wonderfully narrow; in the middle of the town there is hardly more than the width of the chief street between the slopes on either side. And at its eastern end the hill rises to form a truer akropolis, with a steeper path up to it, than can be seen at Segni or Norba. Round the whole of this space, allowing for some late patchings, run the ancient walls of Anagnia, and a mighty and wonderful work they are. But who built them? We must confess that we walked round about them and, as we thought, marked well their bulwarks, in the full belief that we were studying the works of the ancient Hernicans. Let no one fancy that we did not mark the difference between the walls of Anagnia and the strange and mysterious forms which may be seen at Cori and Segni. The walls of Anagni bring us back within the ordinary range of wall-building as practised by ordinary mortals. Hernican Anagnia did not come within either Lord Macaulay's Latin or his Etruscan catalogue; but, had it done so, there would have been no temptation to speak of its bulwarks as "no work of earthly men," or as—

Reared by the hands of giants  
For godlike kings of old.

The walls of Anagni are wonderful only as the great works of Rome are wonderful. They are built by men to whom it was more natural to put together rectangular stones with some kind of regularity than it was to pile together huge polygons anyhow. They were built by men who thoroughly understood the principle of the arch, and who knew how to use it with all boldness. They remain, in various degrees of preservation, round the greater part of the circuit of the town. In some parts they are broken down altogether; in some they are supplanted, in others merely patched, by walls of later date; in short, they have gone through all the casualties which a wall is likely to go through in the course of two millenniums or so; but the wall of modern Anagni, as a whole, is still the old wall of Anagnia. The construction differs a good deal in different parts as to the size of the stones and as to their nature, and as to the degree of rudeness or finish in the work. In some parts the wall stands single; in others it is strengthened by further defences, buttresses rather than towers—defences, by the way, which must be carefully distinguished from the additions of later times. But one general character reigns throughout. The stones, greater and smaller, smoother and rougher, are always rectangular, and always laid with some measure of regularity. In some cases ranges of larger and smaller stones alternate; in



one part of the wall stones of two natures and colours almost alternate. The chief material is a light-coloured stone exactly like the *puft-stone* of Gloucestershire, the material of Berkeley Castle, and not a few other buildings in that neighbourhood. This is eked out here and there by the dark volcanic *peperino*, which, towards the south-eastern part of the wall, is used much more freely. The general effect, however, wherever the wall is at all perfect, is stately and striking in the extreme, both in form and colour.

One thing is plain, that the builders of the walls of Anagnia, like the builders of the *cloaca* of Rome, but most unlike the elder builders of Cori and Signia, knew as well as any men how to turn arches. On the highest point of the town, by the modern gate, which looks out towards Ferentino, within the circuit of the ancient *arx*, we may still see, blocked, partly hidden by the modern gate, disguised by the arrangements of the mediæval castle, the double gate of the ancient wall. It is perfectly plain, but with arches thoroughly well turned, with a double range of voussoirs. A smaller arch of the same workmanship beside them looks almost as if it had been blocked from the beginning. The *arx* itself, it should be remembered, had its separate wall within that of the city, a noble fragment of which, of exactly the same character as the town wall, is still to be seen in a narrow street a little lower down.

When we actually reach Anagni there can be no doubt that the character in which it chiefly strikes us is that of the city of the Hernican walls, if Hernican walls we may call them. But, historically, Anagni is so far more famous as the city of mediæval popes that it is fitting that it should have something to show in that character also. The town is rich in mediæval fragments. The main street, in its winding courses, displays long ranges of blocked arcades, round and pointed, which when open must have given it, narrow and often dim as it is, no small measure of stateliness. Not a few buildings stand out with arches of vast height and boldness, suggesting, as it is fit that one papal city should suggest to another, the mighty works of Rome's absent bishops at Avignon. Not remarkable for height, but most remarkable for their span, are the exceedingly bold arches which support the communal palace, once, it is said, the dwelling of the popes, a building which on its northern side shows a range of windows which savour of France or England rather than of Italy. The houses, with their staircases, often present highly picturesque shapes, which in one house in the main street, where the outside staircase is sheltered by two arches resting on a graceful column, grow into a form of genuine beauty. And an elegant form of double window, two round arches divided by a slender shaft, is characteristic of the architecture of Anagni. It is needless to add that at Anagni, as everywhere else in Italy, most of these relics of the skill of former times have been mercilessly disfigured and mutilated.

In the ecclesiastical line the other churches supply a few good fragments of the same character as those in the domestic building; but the cathedral church within the *arx* is the only one which has the least claim to be looked on as a striking whole. It stands boldly on the edge of the hill with its east end—that is, what would be east according to northern rules, for it is in truth nearly west—rising up nobly with its three apses in good Romanesque style, while a stately bell-tower of the more massive sort, though sadly marred on two sides, stands near the east end which should be west. The crypt is in a somewhat ruder form of the same style. The whole outside of the church is worth study; the inside is of an early and massive type of the Italian Gothic, always, unless in the case of some unusual merit, less satisfactory than Italian Romanesque. The sacristy contains the vestments of Innocent III. and Boniface VIII., and a good many other curious objects. The church is just now suffering restoration; let us hope that nothing very dreadful will happen to it. There, at least, seems no disposition to pull down the apse, after the pattern of the church which popes and emperors alike have decreed to be the mother church of Rome and of the world.

## THE SURVEY OF INDIA.

THE fourth report, that for the year 1880-81, of the amalgamated Department of the Survey of India deals with the work of the Trigonometrical, Topographical, and Cadastral Survey parties, with geographical and miscellaneous operations, and with the work of the head-quarter offices at Calcutta and Dehra Dun. The principal triangulation of all India was brought to a close during the year under review by the completion of the Northern Section of the Eastern Sind Meridional series. Outside the limits of India Proper a chain of triangles, known as the Eastern Frontier series, was very nearly completed.

Thirteen separate parties were engaged in topographical work in connection with previously projected surveys. Of these, three parties were employed in Rajputana and Central India, four in the Bombay Presidency, and the remaining six in various parts of other provinces. The first three parties were working nearly parallel to each other, from east to west, across the breadth of Central India and Rajputana. The most northerly party had

advanced in its survey of Rajputana to the sandy deserts of Jeelsumir, and so devoid is the country of topographical features that a scale of one-half inch to the mile was considered sufficient. South of this party a second was engaged on the survey of the petty Central India States lying around Mount Abo. The third and most southerly party had advanced out of Bhopal and Malwa, where it first broke ground in 1870, into Rutlam and Banswara. Over 24,000 square miles of country had already been surveyed by this party, and some 4,000 miles remained before the frontiers of Gujarat would be reached. In a very few years the topographical survey of the whole of Central India and Rajputana, from the Central Provinces on the east to the Punjab and Sind on the west, will be completed, and accurate maps will be available of this comparatively unknown and difficult country. Of the four parties employed in the Bombay Presidency, one was in Gujarat, a second in Khandesh, and two others in the Deccan and in the Concan respectively. The Gujarat party had completed the survey of 14,300 square miles, and had 16,700 more to do. This survey, like the other topographical surveys in the presidency, was being made chiefly on the two-inch scale, and mapped both on the two-inch and on the reduced one-inch scale. Specimens of the Gujarat maps were exhibited at the Venice Geographical Congress, and obtained the honourable reward of a gold medal. In this survey much of the topographical details were taken from the field maps of the Bombay Revenue Survey. The economy of this is obvious, and the more recent work done by the Survey Settlement Department of the presidency approaches in its accuracy a scientific survey. In Khandesh the survey was approaching completion, as only 2,650 square miles remained unsurveyed at the close of the season. The Deccan party was chiefly engaged in the survey of the Kaladgi District, and the adjoining native states of the Satara District. The northern half of the Deccan has now been topographically surveyed, and the second party which was formerly employed there was, during the year under review, engaged on the survey of the Concan. Good progress was made by all the four survey parties in the presidency, though in the Concan the difficult nature of the ground made the outturn relatively small. Topographical surveys were also prosecuted in Kohat and Baluchistan, Cutch, the North-Western Provinces, Sylhet, and Mysore. The two former are important from a military point of view. In Baluchistan the party surveyed and mapped several thousand miles of the country north of Quetta, and between Quetta and Khelat. These surveys were on the half and quarter-inch scales. In Kohat the smallness of the party employed told against the outturn of work for the year. The operations of the Sylhet and Cutch parties do not require particular remark. In Mysore the topographical survey of the province was being pushed on as fast as circumstances would permit; 12,754 miles had been surveyed on the one-inch scale, and 17,800 miles remained to be done, but most of this latter area had been triangulated in advance. The party in the North-Western Provinces was employed on the topographical survey on the two-inch scale of the Gangetic Doab. For this survey the boundaries of villages were being ascertained from the Revenue Settlement maps.

The one *mauzawar* or revenue survey party which was employed in the Punjab, completed the survey of Dera Ismail Khan on the four-inch scale, and also surveyed some small forest areas in the Rawalpindi district. It may be noticed that the term "revenue survey" as applied to the four-inch surveys, which has now been practically completed in the Punjab, is a misnomer. It has no immediate connection with the land-revenue administration or the assessment of revenue, and where settlements are in progress a separate field-to-field survey is made by provincial survey parties under the Settlement Department. The latter, it is true, are able to utilise the topographical information and fixed points of the Imperial "revenue survey" maps, but beyond this can derive but little assistance from them.

Cadastral or field-survey operations were vigorously prosecuted in the North-Western Provinces and in British Burma. Of the three parties employed in the former province one completed the survey of the Jaunpur district; the second made good progress in Mirzapur; and the third completed the districts of Ghazipur and Ballia with the exception of 858 square miles. The survey of the permanently-settled portion of the North-Western Provinces was thus rapidly approaching completion. In British Burma three parties were at work in connection with the revision of the land assessment of the province. The largest outturn, 786 miles, surveyed on the 16-inch scale, was attained by the party employed in the Hanthawaddy district. In Bassein progress was impeded by heavy jungle and the scattered character of the cultivation. In the Tharawaddy district the party was a newly-formed one, which began work late in the season, and the outturn was therefore only 461 square miles.

Geographical knowledge in Afghanistan was extended by the surveys made in Waziristan in connection with the Waziri expedition. Kandahar and the surrounding country was also surveyed. No less than 39,500 square miles of Afghanistan have been surveyed, in more or less detail, since the British occupation in 1879. The great services rendered to the army by the Survey Department have been frequently acknowledged by military authorities.

The tidal operations of the department consist of the registration of tides at fourteen ports in India, Burma, and the An-



damans. The observations taken at the several stations are reported to the superintendent in charge of the operations, and furnish the basis of subsequent calculations. The instruments employed were exhibited at the Venice Congress, and obtained a first-class medal.

The attempt to connect the mean sea levels of Madras and Bombay by a line of spirit-levels carried directly across the peninsula was disappointing. The result makes the mean sea level about three feet higher in Madras than Bombay, and the difference is considered to be due to some flaw in the levelling operations.

There remain for notice the mapping and other scientific work done during the year in the head-quarter offices of the department. The issue of a new map of India on the scale of one inch to 32 miles was perhaps the most important performance in the map department. It has deservedly been appreciated by the general public for its clearness and fulness of detail. A map of Southern Afghanistan in four sheets, and many other important topographical maps, were also published. The work in connection with the cadastral surveys was very heavy, as no less than 4,545 new maps were issued, most of them being executed by the photozincographic process.

The cost of the surveys executed by the topographical branch is not given. In this respect the details furnished for the revenue branch are more complete. The cost of the topographical work done in that branch was 25 rupees the square mile in the Deccan, 33 rupees in the Concan, and 31 rupees in the Meerut division of the North-Western Provinces. There was a satisfactory decrease in the cost of the cadastral surveys; the party in Ghazipur were working at the low rate of 163 rupees per square mile, and the party in Mirzapur at the still lower rate of 140 rupees. The Burma surveys are naturally more expensive, but the rate of 200 rupees the mile to which the survey of the Hanthawaddy district had been reduced was considered extremely creditable. It is hoped that the cost of cadastral work may eventually be still further reduced, and the main objection to such surveys removed. The abolition of field-books has proved to be a most economical measure, and conclusive testimony has been supplied from British Burma and the North-Western Provinces in favour of the present system of plotting the measurements direct on the maps. If this one reform has increased, as has been stated, the outturn of work by one-fourth, the extreme importance of simplifying methods of work, and of utilising existing agencies, is obvious.

Up to the end of the year 1880-81 eighteen districts of the Madras Presidency had been taken up for survey; altogether 47,802 square miles of revenue survey and 42,000 square miles of topographical survey had been finished, leaving 13,733 square miles of cadastral survey and 17,258 of topographical survey to be completed in those districts. During the year field parties were employed in ten districts, and the outturn in field demarcation and survey was 1,322 and 1,324 square miles respectively. The publication of maps was carried on as usual in the central office. The traverse work of the revenue survey was connected with 54 stations of the trigonometrical survey, and the comparison of distances showed a mean error in traversing of 7.55 feet per mile. The total outlay of the Madras Revenue Survey Department during the year 1880-81 was 56,952*l*.

Thirty-eight parties were employed during 1880-81 on the revenue survey of the Bombay Presidency. The outturn comprised the measurement and classification of 3,416 square miles. Survey operations were in progress in the native states of Savantvadi, Bhor, Kolhapur, and the Southern Maratha feudatories, the expenditure being defrayed by the respective states. The outlay of the Bombay Revenue Survey Department during 1880-81 was 59,571*l*.

The city survey, which had been introduced into ten towns in the Presidency, was still not quite completed for Ahmedabad, Dharwar, and Hubli.



#### Asphalte and Concrete Flats.—Watson v. Langmead & Way.

SIR,—Permit me to offer a word of explanation why I gave evidence against Mr. T. H. Watson, another district surveyor, in the case of Watson v. Langmead & Way, with reference to asphalte flats.

During the past year Mr. Vulliamy, the superintending architect to the Metropolitan Board of Works, has sanctioned and approved a large block of artisans' dwellings lately erected in my district, covering nearly the whole site of Newport Market, or nearly half an acre of land; the whole of these blocks of houses, thirteen in number, are entirely covered with concrete and asphalte flats, used as drying-grounds and play-grounds for children.

When Mr. D. Cubitt Nicholls mentioned the small flat Mr. Watson objected to at the back of the house in Half Moon Street,

I felt that I was in an awkward dilemma. If Mr. Watson succeeded in his case, it would become my duty to proceed against the owners of these houses for work covering nearly half an acre of land, which Mr. Vulliamy had approved, sanctioned, and passed, and which I myself entirely approve, as, from large experience in this matter, I know that concrete and asphalte flats are the best possible roof coverings for this class of dwellings.

The magistrate said that in these cases he always preferred, where two district surveyors differed as to the meaning of any part of the Building Act, that they should try and settle it before they came into court. From my experience of Mr. Watson's conduct in a former case I had with him in his district, I knew it would be useless to try and adopt this course. I am informed it is now attempted to be proved that the asphalte at Half Moon Street was of an inferior quality; this I absolutely deny, and Mr. Watson attacked in his evidence all asphaltes in general as a roof covering.

The obvious moral from the case is that district surveyors, before hastily summoning builders with respect to modern applications of new materials, should ascertain what other district surveyors and architects are doing, and not rely entirely on their own experience, especially when that, as in this case, was limited to a mere experiment in a jet of gas flame.

Yours, &c.,  
ROBERT WALKER, F.R.I.B.A.

#### ART SCHOOLS.

**Liverpool.**—The new art school will be opened on Monday, the 30th inst. The building occupies a conspicuous position at the corner of Hope and Mount Streets, and has a frontage to the latter street of about 130 feet, thereby securing an excellent north light, which is a great desideratum in a building of this class. The principal entrance is placed in the centre of the Mount Street façade, access being obtained by three short flights of stone steps 11 feet wide, and which lead up to the ground or principal floor level. Directly facing the principal entrance is a spacious hall and staircase, at the foot of the latter being a row of polished Scagliola columns in imitation of verde antique marble. The staircase is amply lighted by three large semicircular-headed windows of embossed plate-glass, and having Scagliola marble pilasters between. The staircase is of stone, the flights being 6 feet wide, having Spanish mahogany hand-rails, with ornamental iron balusters of very chaste design. The floor of the entrance vestibule, hall, and staircase is laid with ceramic mosaic paving from specially prepared designs. The corridors of communication to the different apartments are 6 feet wide. The accommodation on the ground-floor comprises attendant's-room, male and female cloak and retiring-rooms. The dimensions of the different rooms are as follow: First elementary-room, 52 feet by 25; second elementary-room, 29 feet by 23; architectural-room, 29 feet by 23; modelling-room and store-room; and, on first floor, painting-room, 26 feet 6 inches by 25 feet; life class-room, 32 feet by 25; first antique-room, 54 feet 9 inches by 33 feet; second antique-room, 29 feet by 23; and headmaster's-room, 23 feet by 11. A lift is also provided in the building. The doorways from corridors to the different apartments have moulded pedimental heads; and the windows, where needful, are provided with Messrs. Bennett & Co.'s revolving wood shutters, by means of which the admission of light may be regulated to suit the various requirements. The rooms are warmed by means of Messrs. Yates, Haywood & Co.'s slow combustion stoves, additional heat being also obtained by carrying up the smoke-pipes almost to the full height of the room before connecting to the flue, and, they being surrounded by an ornamental iron casing, a pleasing appearance is obtained. The corridor and staircase are warmed by hot-water pipes. The building is ventilated by means of Messrs. Robert Boyle & Son's patent air-pump ventilators, with the necessary extraction flues for foul air connected to same. Fresh air is admitted to the various apartments through Tobin's air-tubes. The gas-lighting arrangements are being executed by Messrs. Sugg & Co., of Westminster. The building externally is faced with Cefn stone, except the portion below ground-floor level, which is of Runcorn stone. The style of architecture adopted is Palladian in character. The roofs are covered with Port Dinorwic green slates, and the internal joiners' work is of pitch pine, stained and varnished. The building has been erected from the designs and under the superintendence of Mr. Thomas Cook, architect and surveyor, of 12 St. George's Crescent, Liverpool, who obtained the first premium in a competition for the building. The cost, including furniture and fittings, has been about 12,000*l*. Mr. Wilkinson Bell has acted as clerk of the works in a very efficient manner. Mr. Samuel Webster, of Brasenose Road, Bootle, has been the sole contractor for the work, the sub-contractors for the different branches being as follows, viz.: Brickwork, Messrs. Roberts & Robinson; masonry, Mr. Jones; ironwork, Messrs. Price & Scott; slating and plastering and Scagliola work, Mr. Thomas Jones, Mount Pleasant; plumbing, glazing, and painting, Mr. John Powell, Mount Pleasant; stoves and ornamental balusters, Messrs. Yates, Haywood & Co.,



Wood Street; heating apparatus, Messrs. Tessmund & Kissack, Blackstock Street; ceramic mosaic paving, Mr. George Swift, The Temple, Dale Street; ornamental railing and gutters, Messrs. George Smith & Co., Glasgow; hoist, Mr. A. Abbot, Lord Street; furniture and fittings, Messrs. Brown & Backhouse, Chatham Street; ventilation, Messrs. Gibbs & Son, South John Street.

### SANITARY WORKS.

**New Baths, Whitehaven.**—New baths and washhouses for the town are being constructed. All the external walls are ashlar, and the work inside and out is to be of the same quality. The principal front, although the narrowest, is in Duke Street. In this front is the entrance to the baths, which is dignified by a Roman Doric portico. The wall surrounding the Turkish bath has on its external surface carved subject panels. Passing through the door a wide lobby is entered, and ascending six steps and passing the ticket office, the waiting-room is reached. This room is centrally placed for swimming-bath, private baths, and Turkish bath. Upon this floor are the gentlemen's private baths—which can either be salt or fresh water—and the cooling-room of the Turkish bath in the Moorish style, lighted by a lantern filled with many tinted glass. There are four couches in this room. Attached to this room is a small closet for storing valuables, in charge of the attendant. Descending a staircase leading from this room we reach the hot rooms. They are three in number, the last being the hottest, and slightly elevated above the other two. The shampooing-room has a tiled floor and two marble couches. After being shampooed, the bather has the choice of taking either the shower, spray, or plunge bath. He then ascends to the cooling-room, where, reclining on one of the couches, he can have a cup of coffee and a cigar. The private baths are tastefully fitted up and supplied with Rufford's porcelain baths. The ladies' baths, with separate waiting-room, are on the first floor, and are in every respect the same as those for the gentlemen. The swimming baths, which will be filled with pure salt water pumped from end of North Pier, is 54 feet 6 inches by 30 feet; 3 feet 6 inches deep at the shallow end, 5 feet 6 inches deep at the other, and 7 feet deep 15 feet away from the diving-board. There are twenty-two dressing boxes, and a shower bath. This room is adapted for a gymnasium or lecture-hall, for which purpose it may be used in the winter months, when a floor would be put across the bath. In one corner of this building there is a small room with vapour and needle baths. Medicated baths will also be attainable. The wash-house is entered from Peat Place. It is a one-storied building with a light iron roof over. It will be fitted with every modern appliance for washing and drying. There are thirty-eight stalls for washing in, supplied with hot and cold water. There are also two hydro-extractors for rinsing the clothes. In the centre of the room is the drying closet. Half the stalls are so arranged that the clothes can be washed in perfect privacy, each woman being able to wash and use the drying-room without leaving her stall. In connection with this wash-house is a mangle, ironing-stone, waiting-room, pay-office, store-room, &c. There is also a private wash-room for the Bath Company's things. Close to the wash-houses is the engine-house. This is entered from Strand Street. The boiler is a Cornish steam boiler, 14 feet long and 4 feet 6 inches diameter. The engine is a four-horse vertical engine with 7-inch diameter cylinder. In addition to pumping the salt water and supplying the motive power for the wash-house, it is proposed that it should work a dynamo-electric machine to light the whole of the premises by Swan's incandescent lamps. Mr. T. Lewis Banks (now Messrs. T. L. Banks & Townsend), of Whitehaven and London, is the architect.

### CHURCH BUILDING AND RESTORATION.

**Groombridge.**—The foundation-stone of a new church at Groombridge has been laid. The church, which will be built of local sandstone, is designed in the Late Decorated style, and will consist of a nave, chancel, organ chamber, vestry, &c., and will accommodate 200 persons. Mr. Norman Shaw, R.A., is the architect, and Mr. Payne, of Crowborough, the builder. The estimated cost of the structure and fittings is 2,000*l*.

**Cilgwyn Church, Pembrokeshire.**—The Bishop of St. David's reopened this little church on Tuesday, the 17th inst., after a restoration which has practically amounted to a rebuilding, a small portion of the walls only being sound enough to retain. The simple parallelogram outline of the building, with its continuous roof, has not been changed, but the chancel portion has been marked outside by an ornamental cresting, and inside by an arched boarded ceiling, the nave roof being open up to the ridge, and plastered between the rafters. A new oak-framed porch has been placed on the south side, the entrance altered from the wall opposite, and a new oak-framed bell spirette, in harmony with the porch, has been placed at the west end. The slates are from a local quarry, the window and doorway stonework from the Forest of Dean, the encaustic tiles from Webb's Worcester Works, and

the wrought ironwork from Messrs. Brawn, of Birmingham. The accommodation has been raised from sixty-four to ninety-one, the fittings being all new of pitch pine, the old richly-carved square Norman font bowl being mounted on a new base. The restoration has been principally due to the efforts of Mr. J. B. Bowen, of Llwyngwair, late M.P. for the county of Pembroke, assisted by a grant from the Incorporated Church Building Society. The contractors were Messrs. Thomas, Joshua & Griffiths, of Kilgerran, and the architect Mr. E. H. Lingen Barker, of Hereford.

**Newtown.**—A new Baptist chapel has been opened in Newtown. The cost of erection, with site, &c., has been about 10,000*l*. The building was designed and carried out under the direction of Mr. George Morgan, architect, of Carmarthen. Mr. C. Young, of Pembroke Dock, was the clerk of the works, and Messrs. Griffiths, Vaughan & Co., of Knockin, near Westfelton, Salop, were the contractors.

**Preston.**—The new church of St. Matthew, New Hall Lane, Preston, has been opened. The church is erected from designs prepared by Mr. J. Hibbert, of Preston. At present only the nave and aisles are completed, but it is intended later on to remove the north-east wall and erect a chancel, organ loft, and tower. The cost of the church so far is about 6,500*l*.

### GENERAL.

**Mr. Herkomer, A.R.A.**, has been awarded a diploma of honour in the section of painting of the Amsterdam Exhibition.

**M. Conrad Freyberg** has obtained a commission from Prince Frederick Charles to paint the memorable scene of the surrender of the French standards at the capitulation of Metz.

**Mr. Charles Vacher**, the water-colour painter, died at his residence, in South Kensington, on Saturday last.

**Mr. R. R. Farrer, Fellow of All Souls' College**, died on Saturday at the early age of twenty-six. He travelled through a great part of Greece, and contributed some of his observations to *The Architect*. Mr. Farrer was joint author with Lord Windsor of a volume entitled "A Tour in Greece."

The Greek Government have intimated that a site will be granted in Athens for any buildings that may be required for the proposed British school. The subscriptions for the project now exceed 6,000*l*.

**Messrs. R. Dennett & Ingle** constructed the fireproof flooring in the new Shire Hall at Shrewsbury.

**A Lace Manufacturer of Nottingham**, Mr. Cutts, in recognition of the advantages derived by the study of design in the Nottingham School of Art, has given 20*l*. towards the annual local prize fund for the best lace designs executed by the students.

The "Dundee Advertiser" says that the Perth Town Council have resolved to raise an action in the Court of Session to compel the North British Railway Company to remove the ruins of the old Tay Bridge before proceeding with the erection of the new one.

**Ingestre Hall**, one of the seats of the Earl of Shrewsbury, is being restored after the late fire, under the direction of Mr. Birch.

The Rochester Bridge Wardens have resolved, so it is said, with the sanction of the Charity Commissioners, to spend 20,000*l*. of their surplus funds for purposes of middle-class education in Maidstone and Rochester, 3,000*l*. for the embankment of the Strood, 3,500*l*. for a pier at Chatham, 1,200*l*. for a pier at Rochester, and other large sums in improved bridges across the Medway.

**Messrs. W. B. Wilkinson & Co.** have issued a new edition of their descriptive catalogue, which contains an elaborate list of works executed by the firm.

The New Infirmary at Bolton was opened on Saturday last. It is on the pavilion principle, and has cost about 35,000*l*.

A Site has been purchased from the War Department at Portsmouth for a college for Roman Catholic priests.

**Columbia Market, Bethnal Green**, which was constructed in 1869 at a cost of 200,000*l*., and has hitherto been a failure, was again re-opened last week as a fish market.

**Thompson's System of Valuation** has been applied to the Board Schools in Great Jackson Street, Manchester, as well as to weaving-sheds and warehouses.

The Royal Institute of Painters in Water-Colours have taken studios in Great Ormond Street, for the purposes of the schools they are about to establish. The instruction in these schools will be wholly gratuitous, but it is not intended for any but those who have, to begin with, a fair proficiency in draughtsmanship. There will be classes for the figure, for landscape, and for still life in water-colour, and likewise a class for black and white. Specimen drawings by intending students must be sent in for examination by the Council by September 1, and the classes will begin a little later in the autumn.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, JULY 28, 1883.

### COMPETITIONS OPEN.

**BELFAST.**—Aug. 1.—Designs are invited for proposed Public Library. Premiums of £100, £50, and £25. Mr. Samuel Block, Town Clerk, Town Hall, Belfast.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**BURNLEY.**—July 31.—Designs are invited for the Erection of a Hospital. Premiums of £100, £50, and £20. Mr. Joshua Rawlinson, Hon. Secretary, Burnley and District Hospital, Burnley.

**NEWCASTLE-ON-TYNE.**—July 30.—Designs are invited for a Hospital for Infectious Diseases to be built on a Site near Heaton Junction. Subject to certain conditions, the successful Architect will have the carrying out of the work, and a premium of 50% will be divided between the second and third competitors. Mr. Hill Motum, Town Clerk, Town Hall, Newcastle-on-Tyne.

### CONTRACTS OPEN.

**ABBEY TOWN.**—July 30.—For Building Dwelling-house, &c. Mr. John Cullens, Highlows, near Abbey Town, Holme Cultram.

**ABERDEEN.**—Aug. 8.—For Addition to Library, King's College. H.M. Office of Works, Whitehall Place, S.W.

**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

**ACCRINGTON.**—July 31.—For Construction of Stone Staircase to Town Hall. The Borough Engineer, Accrington.

**ADDESTONE.**—For Building an Hotel. Mr. C. H. Sparkes, Architect, Addestone.

**BALLINA (County Mayo).**—For Building Convent Schools. Mr. Henry McConnell, Surveyor, 42b Great Brunswick Street, Dublin.

**BARROW-IN-FURNESS.**—July 30.—For Building Hospital. Messrs. Payle & Austin, Architects, Barrow.

**BELFAST.**—Aug. 6.—For Building Post-office. The District Engineer, Post-office, Belfast.

**BIRMINGHAM.**—July 28.—For Alterations and Additions and Boundary Wall to Workhouse. Mr. W. H. Ward, Architect, Paradise Street, Birmingham.

**BOOTLE.**—July 28.—For Building Club House. Mr. D. Lyon, Architect, Leith Offices, Moorfields, Liverpool.

**BRISTOL.**—Aug. 1.—For Erection of Manufactory and other Buildings. Mr. H. C. M. Hirst, 30 Broad Street, Bristol.

**CARLISLE.**—Aug. 7.—For Construction of Public Baths in James Street. Mr. J. Hepworth, Gas and Waterworks Office, Carlisle.

**CHICHESTER.**—For Enlargement of Boys' School, Tower Street. Mr. G. O. Inkpen, Architect, the Cross, Chichester.

**COCKERMOUTH.**—Aug. 6.—For Building Double School, for 250 Boys and 210 Infants. Mr. R. S. Marsh, Surveyor, Cockermouth.

**DUNGANNON.**—Aug. 15.—For Building Sunday School and Parochial Hall. Rev. Lewis Richards, Dungannon.

**EASTWOOD.**—Aug. 11.—For Building Mission Church. Mr. J. B. Bailey, Architect, North Street, Kelgbley.

**EDINBURGH.**—July 30.—For Building Villa in Portobello. Messrs. Knox & Hutton, Architects, 63 York Place, Edinburgh.

**EXETER.**—August.—For Building Asylum to Accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect 14 Farnival's Inn, E.C.

**GLASGOW.**—Aug. 6.—For Works to College Station (Contract No. 2). Drawings at the Engineer's Office, St. Enoch Station, Glasgow.

**GRAVESEND.**—Aug. 7.—For Additions and Alterations to Portion of Market Place to form Fire Engine Station, &c. Mr. Samuel Parr, Architect, 15 High Street, Gravesend.

**HALIFAX.**—July 31.—For Building Four Houses and Stables at Hope Hall. Mr. J. Wilson, Architect, Queen's Road, Halifax.

**HALIFAX.**—Aug. 10.—For Building Twenty-four Dwelling-houses. Messrs. Jackson & Fox, 22 George Street, Halifax.

**HOMERTON.**—Aug. 6.—For Alterations and Additions to Union Workhouse. Mr. George Judge, Architect.

**HORBRURY.**—Aug. 6.—For Building Wesleyan Chapel. Mr. Walter Hanstock, Architect, Branch Road, Batley.

**IPSWICH.**—Aug. 3.—For Extension of Wesleyan Schools. Mr. William Eade, Architect, Post Office Chambers, Ipswich.

**MIDDLESBROUGH.**—July 28.—For Construction of Public Baths, including large Swimming Bath. The Borough Surveyor, Lower Commercial Street, Middlesbrough.

**NEWPORT.**—Aug. 1.—For Conversion of Wesley Chapel into Shops and Business Premises. Mr. B. Lawrence, 1 Tredegar Place, Newport, Mon.

**NORMANTON.**—Aug. 4.—For Building School and Classroom. Mr. T. Reid, Architect, The Grove, Normanton.

**NOTTINGHAM.**—For Building Shops and Business Premises. Mr. Arthur W. Brewill, Architect, Exchange Walk, Nottingham.

**OGMORE VALE.**—July 31.—For Additions and Alterations to Craighiwglyn School. Mr. D. Vaughan, Tynnewydd, near Bridgend.

**TENDRING.**—Aug. 10.—For Construction of Three Groynes and Repairs to Forty-seven Groynes and Sea Wall. Mr. W. Howard, jun., Solicitor, Headgate Court, Colchester.

**YORK.**—July 28.—For Building Post Office. H.M. Office of Works, Albion Place, Leeds.

## TENDERS.

### BICTON.

For Erection of Range of Farm Buildings at Bicton Asylum, near Shrewsbury. Mr. THOMAS GROVES, County Surveyor, Architect. Quantities by the Architect.

Harries, Shrewsbury	£1,895 0 0
George, Shrewsbury	1,865 0 0
Cross, Shrewsbury	1,812 0 0
Gethin, Shrewsbury	1,800 0 0
Warburton, Harpurhey	1,775 0 0
Everall & Morris, Shrewsbury	1,731 0 0
Bowdler & Co., Shrewsbury	1,700 0 0
France, Shrewsbury	1,680 0 0
Treasure & Son, Shrewsbury	1,630 0 0
Farmer, Shrewsbury	1,489 0 0

### CLOGHEEN.

For Building Cottage Hospital on the Workhouse Grounds, Clogheen.

Ward	£256 0 0
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The above was the only tender received.

### CROWHURST.

For Rebuilding Crowhurst Bridge, County Sussex. Mr. H. CARD, County Surveyor, Lewes.

Banks, Burwash	£390 0 0
Thompson, Burwash	365 0 0
BALCOMBE, Titchhurst (accepted)	349 0 0

### EAST LISS.

For Extra Works, Havelock House, Hill Brow Estate, East Liss, Hants, for Mr. George Wright. Mr. MARK H. JUDGE, A.R.I.B.A., Architect.

ANDREWS (accepted)	£358 1 0
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### ENFIELD.

For Erection of House for Mr. W. Strangman Taylor. Mr. W. GILLBEE SCOTT, F.R.I.B.A., Architect, 102 Guilford Street, Russell Square, W.C.

Gould & Brand	£1,689 0 0
Brown, Son & Blomfield	1,650 0 0
Mattock Bros.	1,633 0 0
Scrivener & Co.	1,617 0 0
Harris & Wardrop	1,592 0 0
Johnson	1,560 0 0
FAIRHEAD, Enfield (accepted)	1,445 0 0

### ENFIELD—continued.

For Harden House, Enfield. Mr. W. GILLBEE SCOTT, F.R.I.B.A., Architect, 102 Guilford Street, Russell Square, W.C.

Brown, Son & Blomfield	£1,150 0 0
Mattock Bros.	1,147 0 0
Scrivener & Co.	1,104 0 0
Johnson	1,100 0 0
Gould & Brand	1,095 0 0
Harris & Wardrop	1,073 0 0
FAIRHEAD, Enfield (accepted)	1,035 0 0

For House on Windmill Hill, Enfield. Mr. C. W. REEVES, A.R.I.B.A., Architect.

Gould & Brand	£1,287 0 0
Scrivener & Co.	1,275 0 0
Brown, Son & Blomfield	1,260 0 0
Mattock Bros.	1,237 0 0
Johnson	1,231 0 0
Fairhead	1,175 0 0
HARRIS & WARDROP (accepted)	1,173 0 0

### FILLONGLEY.

For Building Pair of Cottages, &c. at Fillongley, for the Peoffees of Bond's Hospital. Mr. WILLIAM TOMLINSON, Architect. Quantities by the Architect.

TURNER & BURDETT, Earlsien (accepted).	
Contract 1	£393 13 0
" 2	15 0 0
" 3	24 17 0

Total . . . £443 10 0

### FOREST HILL.

For St. James's Church and Hall, Stanstead Road, Forest Hill. Mr. JAMES TOLLEY, Architect. Quantities supplied by Mr. W. Birdseye.

Church.	Hall.
J. & C. Bowyer	£3,500 0 0
Lathey Bros.	3,490 0 0
Falkner	3,587 0 0
G. H. & A. Bywaters	3,645 0 0
Clarke & Bracey	3,587 0 0
Wall Bros.	3,450 0 0
Jerrard	3,479 0 0
Higgs & Hill	3,520 0 0
Dove Bros.	3,375 0 0
Boyce	3,500 0 0
Corder	3,420 0 0
Jones	3,595 17 5
Deards	3,352 0 0
Marriage	3,440 0 0
Macey & Sons	3,349 0 0

### GRAVESEND.

For Alterations to the Theatre Royal, Gravesend, for General Booth. Plans and Quantities from Surveyor's Department, 101 Queen Victoria Street. Mr. E. J. SHERWOOD, Commissioner for Works.

Dunford & Griffin, Poole	£400 0 0
ARCHER, Gravesend (accepted)	390 0 0

For the Erection of a Hospital for Contagious Diseases, Gravesend, for the Honourable the Corporation of the City of London. Mr. HORACE JONES, Architect. Quantities by Messrs. William Reddall & Son.

Rayner	£5,154 0 0
Naylor	4,820 0 0
Blake	4,500 0 0
Avard	4,435 0 0
Ashby Bros.	4,374 0 0
Colls & Sons	4,242 0 0
Gentry	4,135 0 0
Mortor	4,075 0 0
Mowlem & Co.	3,940 0 0
Perry & Co.	3,900 0 0

### HEREFORD

For New Front and Alterations at No. 16 Commercial Street, Hereford, for Mr. C. W. Slatter. Mr. W. W. ROBINSON, Architect, King Street, Hereford.

Welsh	£950 0 0
Bevan & Hodges	580 0 0
Pensom	580 0 0
Pritchard	533 0 0
CULLIS (accepted)	495 0 0

For a Small House at the Aerated Water Works, for Messrs. Davies & Co., Hereford. Mr. W. W. ROBINSON, Architect, King Street, Hereford.

Welsh	£689 0 0
Rowberry	550 0 0
Ford	540 0 0
Watkins	523 0 0
Lewis	405 0 0
Pritchard	490 0 0
BOWENS & CO. (accepted)	470 0 0



## LEAMINGTON.

For the Erection of Leicester Street Schools, for the Leamington School Board. Messrs. G. B. NICHOLS & SONS, Architects, 64 Queen Victoria Street, E.C., and Handsworth, Birmingham.		
F. & S. Orchard, Banbury	£5,182	0 0
Dover, Oxford	4,650	0 0
Smith, Milverton	4,100	0 0
Coleman Bros., Gloucester	3,898	0 0
Ireson, Waterloo	3,358	0 0
Horton, Brierley Hill	3,198	0 0
Bowen, Leamington	3,180	0 0
FELL, Leamington (accepted)	3,100	0 0

For the Erection of Shrubland Street Schools, for the Leamington School Board. Messrs. G. B. NICHOLS & SONS, Architects, 64 Queen Victoria Street, E.C., and Handsworth, Birmingham.		
F. & S. Orchard, Banbury	£3,797	0 0
Dover, Oxford	3,650	0 0
Smith, Milverton	3,350	0 0
Coleman Bros., Gloucester	3,282	0 0
Ireson, Waterloo	3,026	0 0
Horton, Brierley Hill	2,940	0 0
Lea, Leamington	2,594	4 6
Bowen, Leamington	2,795	0 0
Fell, Leamington	2,750	0 0
BAILEY, Leamington (accepted)	2,660	0 0

## LONDON.

For Building a Pair of Houses at Hampstead. Mr. E. J. MAY, A.R.I.B.A., Architect, 14 Hart Street, Bloomsbury.

ADAMSON & SONS (accepted). £3,995 0 0

For Additions to The Canaries, Bedford Park, Chiswick. Mr. E. J. MAY, A.R.I.B.A., Architect, 14 Hart Street, Bloomsbury.

ADAMSON & SONS (accepted). £1,293 0 0

For Alterations and Additions to No. 75 High Street, Peckham, for Mr. T. Binstead. Mr. WALTER DAVIS, Architect.

DEVEREUX (accepted). £240 0 0

For new Premises, 101A White Lion Street, Islington, for Mr. F. O. Frye. Mr. A. VERNON, Architect.

Hook £535 0 0

Woodbridge 506 7 0

For Building Six Cottages in Bailey's Lane, Stamford Hill, for Mr. A. Sanders. Mr. EDWARD BROWN, Architect, 18 Hanbury Street, Spitalfields.

CHRISTOFFER (accepted). £960 0 0

For Repairs at the Railway Ale Stores, Camden Town, for Mr. J. Ellesworth. Mr. EDWARD BROWN, Surveyor, 18 Hanbury Street, Spitalfields.

SMITH (accepted).

For Repairs at the Surrey Tavern, Battersea, for Mr. G. M. Anderson. Mr. EDWARD BROWN, Surveyor, 18 Hanbury Street, Spitalfields.

Hobbs £118 0 0

Gibbins 107 15 0

READ (accepted) 106 5 0

For Alterations and Additions to Premises, Nos. 71, 73, 77, 79, 81, and 83 High Street, Peckham. Mr. BENJAMIN ELSON, Architect, 115 Long Acre, W.C.

Toms £3,890 0 0

Anley 3,870 0 0

Langmead & Way 3,775 0 0

Haycock 2,954 0 0

DEVEREUX (accepted) 2,857 0 0

For Alterations at the Moorgate Public-house, Moorgate Street, for Messrs. Hammond & Bolton. Mr. H. S. NEWTON, Architect, 27 Great George Street, S.W.

Minchen £1,443 0 0

Hewitt 1,360 0 0

Axford 1,125 0 0

Beale 998 0 0

GODDEN (accepted) 885 0 0

For Alterations and Additions in Forming Flats at South Horseay, for Mr. Charles Tomkins. Mr. G. SHERREN, Architect.

SCOTT (accepted).

For new Shop and Premises, for Mr. Wellbeloved, High Street, Deptford. Mr. JOHN JAS. DOWNES, Architect.

Hall £1,670 0 0

Lordon & Son 1,260 0 0

Redman 1,225 0 0

HOLLOWAY (accepted) 1,190 0 0

For Pulling Down and Rebuilding Women's Oakum Shed at the Workhouse, Prince's Street, Old Gravel Lane, for the Guardians of the Parish of St. George-in-the-East, Middlesex. Messrs. A. & C. HARTON, Architects, 15 Leadenhall Street, E.C.

W. & H. Castle £365 0 0

Moyle & Son 350 0 0

PALMER & SON (accepted) 272 0 0

For Premises for Mr. J. Ramsey, Bethnal Green. Mr. A. C. HENDREY WATKIN, Architect, 2 Rich's Court, Lime Street, E.C.

W. J. & J. Lister £3,480 0 0

Shurmer 2,750 0 0

Marr 2,700 0 0

Holland 2,601 0 0

Jackson & Todd 2,595 0 0

Forrest 2,586 0 0

Thomerson & Son 2,545 0 0

Johnson 2,491 0 0

BEALE (accepted) 2,365 0 0

Architect's estimate 2,500 0 0

For Alterations at the Walpole Arms, New Cross Road, for Mr. C. Mees. Mr. EDWARD BROWN, Architect, 18 Hanbury Street, Spitalfields.

Beal £1,666 0 0

Marr 1,660 0 0

Jackson & Todd 1,646 0 0

Hawkins 1,583 0 0

Shurmer 1,575 0 0

Belcher & Ulmer 1,500 0 0

## Peuterers' Work.

Pringle 141 0 0

Peirce 133 9 0

Paddon 132 0 0

## LONDON—continued.

For New Barracks, High Street, Battersea, for General Booth. Plans and Quantities supplied from Surveyor's Department, 101 Queen Victoria Street. Mr. E. J. SHERWOOD, Commissioner for Works.

Green, Hackney	£1,720	0 0
Shurmer, Clapton	1,647	0 0
Turtle & Appleton, Wandsworth	1,635	0 0
Macey & Sons, Battersea	1,443	0 0
Numford & Griffin, Poole	1,437	0 0

For the Erection of Schools at the East End, Finchley, for the Finchley School Board. Messrs. DUNK & GEDEN, Architects. Quantities by Mr. W. B. Brown.

Priestley & Gurney	£3,880	0 0
Jones & Co.	3,428	0 0
Adcock	3,404	3 8
Steel Bros.	3,345	14 0
Downs	3,222	0 0
Outthwaite & Son	3,176	0 0
Julian & Co.	3,126	0 0
Johnson	3,095	0 0
Yardley & Sons	2,910	5 0
Scrivener & Co.	2,894	0 0
Shurmer	2,749	0 0
Wall	2,623	0 0
Grover	2,523	0 0
Oldrey	2,519	0 0
Sargeant	2,443	0 0
Brass	2,424	0 0
Lawrance	2,132	0 0

For the Erection of Schools at the North End, Finchley, for the Finchley School Board. Messrs. DUNK & GEDEN, Architects. Quantities by Mr. W. B. Brown.

Priestley & Gurney	£2,462	0 0
Steel Bros.	2,847	5 0
Jones & Co.	2,668	0 0
Adcock	2,502	19 7
Outthwaite & Son	2,471	0 0
Downs	2,455	0 0
Julian & Co.	2,313	0 0
Johnson	2,275	1 0
Yardley & Sons	2,182	1 6
Scrivener & Co.	2,112	0 0
Shurmer	2,884	0 0
Wall	2,871	0 0
Oldrey	2,737	0 0
Grover	2,722	0 0
Sargeant	2,708	0 0
Brass	2,700	0 0
Lawrance	2,312	0 0

For Enlargement of Board School, Ann Street. Mr. E. R. ROBSON, Architect.

Wood	£10,790	0 0
Clarke & Bracey	10,218	0 0
Dove Bros.	8,664	0 0
Hart	8,541	0 0
Patman & Fotheringham	8,496	0 0
Bywaters	8,419	0 0
Tongue	8,357	0 0
Chappell	8,300	0 0
Boyce	8,147	0 0
Manley	8,115	0 0
Lathey Bros.	8,087	0 0
Niblett	8,072	0 0
Scrivener & Co.	7,951	0 0
Langmead & Way	7,937	0 0
Gomm	7,908	0 0
Williams & Son	7,893	0 0
Jerrard	7,878	0 0
Marsland	7,878	0 0
Shurmer	7,866	0 0
Ashby Bros.	7,847	0 0
Pritchard	7,796	0 0
Brass	7,789	0 0
Higgs	7,727	0 0
Peto Bros.	7,700	0 0
Gentry	7,683	0 0
Hudson	7,683	0 0
Stimpson & Co.	7,640	0 0
Smith & Son	7,619	0 0
Wall Bros.	7,597	0 0
Hunt	7,586	0 0
Bangs & Co.	7,560	0 0
Grover	7,482	0 0

For Erection of Board School, Risinghill Street. Mr. E. R. ROBSON, Architect.

Clarke & Bracey	£13,592	0 0
Dove Bros.	13,010	0 0
Larter & Son	12,889	0 0
Outthwaite & Son	12,652	0 0
Ashby Bros.	12,562	0 0
Marsland	12,523	0 0
Morter	12,494	0 0
Lathey Bros.	12,477	0 0
Pritchard	12,473	0 0
Hart	12,464	0 0
Oliver	12,309	0 0
W. & F. Croaker	12,294	0 0
Longmire & Burge	12,213	0 0
Patman & Fotheringham	12,173	0 0
Downs	12,138	0 0
Hobson	12,049	0 0
Shepherd	12,049	0 0
Bywaters	12,045	0 0
Niblett	12,002	0 0
Perry & Co.	12,000	0 0
Scrivener & Co.	11,982	0 0
Smith & Son	11,972	0 0
Reading	11,964	0 0
Oldrey	11,945	0 0
Higgs	11,925	0 0
Williams & Son	11,925	0 0
Boyce	11,921	0 0
Hearle & Son	11,915	0 0
Gentry	11,910	0 0
Stimpson & Co.	11,871	0 0
Peto Bros.	11,870	0 0
Shurmer	11,799	0 0
Brass	11,742	0 0
Langmead & Way	11,696	0 0
Atherton & Latta	11,688	0 0
Wall Bros.	11,595	0 0
Grover	11,573	0 0
Jerrard	11,543	0 0
Hunt	11,317	0 0

## LONDON—continued.

For Enlargement of Board School, Calvert Road. Mr. E. R. ROBSON, Architect.

Gentry	£7,072	0 0
Larter & Son	7,002	0 0
Dove Bros.	6,841	0 0
Larke & Son	6,766	0 0
Hearle & Son	6,615	0 0
Niblett	6,589	0 0
Manley	6,501	0 0
Langmead & Way	6,500	0 0
Gomm & Sons	6,492	0 0
Wood	6,491	0 0
Downs	6,485	0 0
Patman & Fotheringham	6,468	0 0
Marsland	6,456	0 0
Perry & Co.	6,451	0 0
Hart	6,443	0 0
G. H. & A. Bywaters	6,406	0 0
Williams & Son	6,328	0 0
F. & F. J. Wood	6,327	0 0
Brass	6,324	0 0
Tarrant & Son	6,268	0 0
Chappell	6,250	0 0
Scrivener & Co.	6,239	0 0
Hobson	6,234	0 0
Hunt	6,230	0 0
Oliver	6,216	0 0
Shepherd	6,197	0 0
Shurmer	6,192	0 0
Boyce	6,170	0 0
Grover	6,167	0 0
Atherton & Latta	6,145	0 0
Stimpson & Co.	6,140	0 0
Bangs & Co.	6,139	0 0
Wall	6,117	0 0
Oldrey	6,108	0 0
Wall Bros.	6,076	0 0
Smith & Sons	6,024	0 0
Tongue	6,020	0 0
Clarke & Bracey	5,989	0 0
Higgs	5,985	0 0
Johnson & Co.	5,983	0 0
Loneragan Bros.	5,980	0 0
W. & F. Croaker	5,956	0 0
Lathey Bros.	5,933	0 0
Greenwood	5,898	0 0
Pritchard	5,888	0 0
Jerrard	5,847	0 0

For Enlargement of Board School, Chicksand Street. Mr. E. R. ROBSON, Architect.

Wood	£3,105	0 0
Hart	3,025	0 0
Hunt	3,008	0 0
Niblett	2,902	0 0
Hobson	2,900	0 0
Williams & Son	2,889	0 0
Gomm	2,867	0 0
Perry & Co.	2,865	0 0
F. & F. J. Wood	2,841	0 0
Clarke & Bracey	2,833	0 0
Jerrard	2,831	0 0
Dove Bros.	2,823	0 0
Larter & Son	2,818	0 0
Tarrant & Son	2,815	0 0
Lathey Bros.	2,813	0 0
Ashby Bros.	2,800	0 0
Grover	2,800	0 0
Downs	2,798	0 0
Manley	2,798	0 0
Langmead & Way	2,796	0 0
Patman & Fotheringham	2,785	0 0
Pritchard	2,772	0 0
Wall	2,767	0 0
Greenwood	2,750	0 0
W. & F. Croaker	2,750	0 0
Brass	2,745	0 0
Marsland	2,736	0 0
Outthwaite & Son	2,716	0 0
G. H. & A. Bywaters	2,709	0 0
Scrivener & Co.	2,704	0 0
Wall Bros.	2,700	0 0
Oliver	2,689	0 0
Hearle & Son	2,688	0 0
Bangs & Co.	2,666	0 0
Chappell	2,664	0 0
Larke & Son	2,664	0 0
Shurmer	2,645	0 0
Tongue	2,638	0 0
Stimpson & Co.	2,620	0 0
Boyce	2,615	0 0
Atherton & Latta	2,595	0 0
Cox	2,587	0 0
Higgs	2,580	0 0
Smith & Sons	2,536	0 0
Gentry	2,490	0 0

For Erection of Board School, Netley Street. Mr. E. ROBSON, Architect.

Dove Bros.	£7,915	0 0
Lathey Bros.	7,683	0 0
Grover	7,631	0 0
Stimpson & Co.	7,603	0 0
Gentry	7,576	0 0
Longmire & Burge	7,575	0 0
Bywaters	7,546	0 0
Niblett	7,514	0 0
Oldrey	7,460	0 0
Bangs & Co.	7,440	0 0
Atherton & Latta	7,408	0 0
Perry & Co.	7,389	0 0
Jerrard	7,383	0 0
Oliver	7,377	0 0
Clarke & Bracey	7,357	0 0
Langmead & Way	7,273	0 0
Manley	7,270	0 0
Higgs	7,270	0 0
Smith & Sons	7,192	0 0
Brass	7,158	0 0
Shurmur	7,146	0 0
Scrivener & Co.	7,127	0 0
Larter & Son	7,114	0 0
Williams & Son	7,055	0 0
Marsland	7,025	0 0
Pritchard	6,991	0 0
Hunt	6,983	0 0
Wall Bros.	6,914	0 0



LONDON—continued.

For Erection of Board School, Sherbrooke Road. Mr. E. R. Robson, Architect.		
F. & F. J. Wood.	£14,363	0 0
Gentry.	14,200	0 0
Dove Bros.	14,091	0 0
Hobson.	14,000	0 0
Peto Bros.	13,970	0 0
Oliver.	13,910	0 0
Patman & Fotheringham.	13,841	0 0
Higgs & Hill.	13,840	0 0
Glover.	13,830	0 0
Williams & Son.	13,776	0 0
Manley.	13,709	0 0
Smith & Son.	13,683	0 0
Tarrant.	13,650	0 0
Shurmer.	13,645	0 0
Higgs.	13,603	0 0
Scrivener & Co.	13,462	0 0
Shepherd.	13,294	0 0
Niblett.	13,170	0 0
Gom & Son.	13,146	0 0
Longmire & Bargo.	13,119	0 0
Langmead & Way.	13,100	0 0
Stimpson & Co.	13,096	0 0
Atherton & Latta.	13,060	0 0
Perry & Co.	12,950	0 0
Jerrard.	12,943	0 0
Oldrey.	12,928	0 0
Clarke & Bracey.	12,900	0 0
Thorn.	12,799	0 0
Brass.	12,785	0 0
Bywaters.	12,781	0 0
Hart.	12,760	0 0
Lathey Bros.	12,759	0 0
W. & F. Croaker.	12,700	0 0
Reading.	12,699	0 0
Downs.	12,685	0 0
Bangs.	12,677	0 0
Chappell.	12,660	0 0
Ashby Bros.	12,632	0 0
Boyce.	12,621	0 0
Marshall.	12,609	0 0
Hearle & Son.	12,588	0 0
Pritchard.	12,584	0 0
Wall.	12,539	0 0

MARCH.

For Constructing Water-tanks and other Works on the New Park Estate, March, for the Wisbech and Isle of Ely Permanent Building Benefit Society. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
RANDS & SONS, Wisbech (accepted).	£203	0 0

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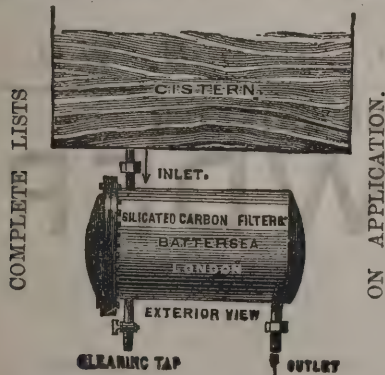
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MILNTHORPE.

For Additions to Royal Oak Inn, Milnthorpe. Mr. JOHN STALKER, Architect. Quantities by the Architect.		
Atkinson, Arnside, joiner's work.	£89	15 0
Pool, Carnforth, mason's work (labour only)	83	0 0
Howarth, Carnforth, slating and plastering.	40	10 3
Thompson, Milnthorpe, plumbing, glazing, and painting.	29	15 0
Total.	£223	0 3

NOTTINGHAM.

For the Erection and Completion of a Factory, with Offices, Bleach Works, Dye Works, Stables, Cottages, at Daybrook, Nottingham, for Messrs. Jacoby & Co. Mr. HERBERT WALKER, C.E., Architect, Nottingham.		
Quantities by the Architect.		
Dennett & Ingle, Nottingham.	£21,580	0 0
Bains & Turton, Basford.	21,080	0 0
Hopewell & Son, Basford.	20,961	18 0
Bell & Son, Nottingham.	20,897	0 0
Wheatley & Maule, Nottingham.	20,650	0 0
Messon, Nottingham.	20,591	0 0
Fisher, Hutchinson & Ashliog, Nottingham.	20,005	0 0
Vickers, Nottingham.	20,000	0 0
Fish & Son, Nottingham.	19,954	8 7
Synan & Kidd, Nottingham.	19,193	0 0
HIND, Nottingham (accepted).	19,193	0 0

Ironwork.

Goddard & Massey, Nottingham.	1,705	0 0
Meadow Foundry Co., Mansfield.	1,626	19 0
Langley Mill Engineering Co.	1,505	8 11
RICHARDS & SON, Leicester (accepted).	1,385	15 0

SELLY OAK.

For Repairs to Workhouse, Selly Oak, King's Norton. Mr. GEORGE INGALL (Ingall & Hughes), Architect. Quantities by the Architect.		
Newey, Harborne.	£1,290	0 0
Bennett, Birmingham.	1,150	0 0
Matthews & Sons, Birmingham.	1,023	0 0
Rowbotham, Birmingham.	999	0 0
Guest, Stourbridge.	960	0 0
Barker & Son, Birmingham.	954	0 0
Maisey, Birmingham.	925	0 0
Lidzey & Evans, Birmingham.	868	0 0
Bennett, Birmingham.	856	0 0
BATES, Birmingham (accepted).	803	0 0

TERRINGTON ST. JOHN.

For Alterations to the Board School, Terrington St. John, Norfolk. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
RANDS & SONS, Wisbech (accepted).	£585	0 0

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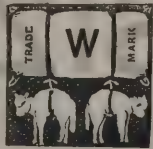
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SOUTHAMPTON.

For the Erection of a Primitive Methodist Chapel, St. Denys, Southampton. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
WYETH (accepted).	£720	0 0

UPTON.

For Congregational Church, Upton, Essex. Messrs. T. L. BANKS & TOWNSEND, Architects. Quantities by Mr. J. Sargeant, Grosvenor Chambers, Grosvenor Gardens, S.W.		
Higgs & Hill.	£6,884	0 0
Hunt.	6,560	0 0
Bangs.	6,556	0 0
Morter.	6,469	0 0
Hack.	6,347	0 0
Hoskins.	6,257	0 0
Downs.	6,200	0 0
Patman & Fotheringham.	6,073	0 0
Gentry.	5,775	0 0
Gregar.	5,580	0 0
Sharpe, Stamford Hill.	5,440	0 0

WALSOKEN.

For new Gates to the Walsoken Burial Ground, for the Burial Board. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
HAMMOND, Walsoken (accepted).	£236	0 0

WISBECH.

For Additional Buildings to the Wisbech Working Men's Club and Institute. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
BAXTER (accepted).	£189	0 0

For Painting and Decorating Rooms, &c., for the Wisbech Working Men's Club and Institute. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
TEED (accepted).	£56	0 0

For Erection of Dwelling-house for Mr. Jas. Walker, Wisbech. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
BAXTER (accepted).	£198	0 0

For Converting Shop and Premises into a Coffee Tavern, Albion Place, Wisbech. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
BAXTER (accepted).	£160	0 0

For Erection of an Additional Bedroom to the Sexton's Lodge, for the Wisbech General Cemetery Company. Messrs. JAMES KERRIDGE & SONS, Architects, Wisbech.		
JARVIS (accepted).	£23	0 0

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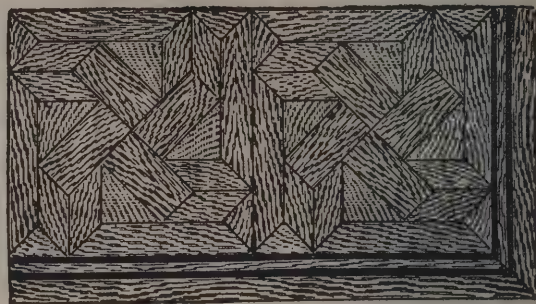


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# The Architect.

## THE SOANE MUSEUM.



TRAVELLERS, as we all know, may often find close at home what shall be quite as well worth seeing as that which is further afield; and in these days of returning Classic taste we need not hesitate to recommend our young architectural tourists of London, while they may perhaps be thinking a good deal about France and Italy, happily becoming more easily accessible every year,

not to forget Lincoln's Inn Fields, a spot so very easily accessible as to be incapable of becoming more so, where the study of architecture, and of a good deal besides that is of interest to the architect, may be pursued at a leisure hour any time, without even the expense of an omnibus ride.

In the early years of the present century one of the two or three leading architectural practitioners in London—architect, for instance, to the Government and to the Bank of England—was Sir JOHN SOANE, Royal Academician, and immediate predecessor, if we calculate rightly, of Mr. C. R. COCKERELL as the Academy Professor. In respect of artistic taste he was, of course, of the Greek school; and the well-known "Bank," which constitutes the centre of the City of London, as of the whole monetary world, is a building of his which, although of less pretentious bulk, or bulkiness, than many towering edifices of later date in the neighbourhood, has always been held in the highest honour as an example of elegant proportion and dignified repose, combined with strictly characteristic effect—the *chef-d'œuvre* of a very good if not a very great architect. In his later years he adopted a curious whim (the admirable OWEN JONES, by-the-by, drifted into a precisely similar fancy), as if he had grown tired of all ambitions, and even of academical design, and were seeking relief in ultra-simplicity; and the house in Lincoln's Inn Fields, which was then his residence and is now his Museum, is one of the most characteristic specimens of a mode of design which he introduced as a new style of his own, but which, in its singular poverty of effect, produced by the repudiation of all moulded detail, and the substitution of nothing else but mere grooved panelling, is so utterly futile as to be out of the reach of criticism. At any rate, a natty odd-looking little house, which stands near the middle of the north side of Lincoln's Inn Fields, and is of an aspect so very much out of character with the place that it can not possibly be mistaken, is the Soane Museum of Architecture.

In his very old age Sir JOHN SOANE found himself a solitary occupier of this house under somewhat trying circumstances. An incompatibility of temperament having become chronic between him and his only son, GEORGE SOANE the critic, who had gone so far as to lampoon his father in the press, he had disinherited this disloyal descendant, and had resolved to devote his fortune to the benefit of the profession in which he had acquired it. Accordingly, he made arrangements for the establishment of an architectural museum and the endowment of an architectural charity. The Charity took the form of a fund in consols, the dividends of which, as they accrued, should be distributed amongst needy persons claiming a connection with the architectural profession. The Museum, on the other hand, was to be this his own private house, containing, as they stood, his collections of drawings, books, models, casts, sculptures, paintings, and curiosities, to be preserved in perpetuity for the free inspection and study of all applicants.

The house was crammed as full of those articles as any house could well be; and so it is still. Indeed it was, and is, more than merely crammed full. Besides the rooms and staircase of ordinary use, there are special mouse-holes of passages and galleries in which the visitor is literally unable to turn, and yet whose every foot of wall-space is covered with some thing of value. A celebrated mummy, amongst other objects, with its sarcophagus, occupies the basement. The windows of the rooms have shutters, which carry pictures, and which, when turned on their hinges, disclose to view other pictures of equal importance carried on the reverse or back. Quaint "dodges"

in the way of lighting, for the contrivance of which SOANE was not a little celebrated (as in his old Law Courts at Westminster Hall, recently vacated), pervade the place, and serve to multiply with surprising ingenuity the availability of surfaces. Famous paintings by famous painters—as HOGARTH'S series, *The Rake's Progress*—stand on screens for want of better hanging. Collections of gems and other delicate objects of art occupy the window recesses. Noble statuary is set up almost anywhere and anyhow in the miserably contracted space. In a word, the whole exhibition is stuffy and almost stifling with mere crowding, like any "old curiosity shop" in Wardour Street or Hanway Yard; and, although the stock (in the language of commerce) is manifestly of considerable money value and of no little artistic merit, the display is more than anything else a *memento mori*—a memorial of the contracted intelligence of a most worthy gentleman who, less than fifty years ago, could commit himself to the act of bequeathing such a house and such contents to the British nation in perpetuity as a Museum of Architectural Art.

Our ideas of a Museum of Art have indeed wonderfully changed since Sir JOHN SOANE'S day. Sir HENRY COLE and South Kensington need only be mentioned, without a word of comment or of explanation, to indicate the force of the difference. Even the singularly discouraging adventure which "under the shadow of the Abbey" has so long and hopelessly struggled to represent little beyond the art of Mediæval carving, may be quoted as an example of the inevitable failure that must attend the efforts of inadequate means in the best direction to overtake the rapid artistic developments of the present generation. The Soane Museum is in fact quite behind the age; so far behind the age, indeed, as to be what is familiarly called nowhere. It is not in the slightest degree too much to say that it is useless, a mere waste of house-room and capital and attendance. And yet, as we have said, the collection of architectural and other artistic objects is of very considerable value and of very considerable merit. It is not the first time the question has been asked, and we have no sort of hope of obtaining an answer; but we cannot help inquiring once more, What is the right thing to do with the Soane Museum?

The time surely must come before long when the Royal Institute of Architects shall assert itself before the public and the architectural profession in a very different attitude from that which it assumes at present; and if this is to be well done when it is done—and we do not say it ought not to be done quickly—probably the acquisition and maintenance of a technical museum must be one of the prominent features in the advanced programme. The transfer of the Architectural Museum at Westminster to the charge of the Institute has frequently been suggested as a step in the right direction. It is scarcely necessary to explain, however, that this would only be a transfer of financial difficulties; and thus it is quite natural that the Institute has not been able to see its way to accept a valuable collection of specimens at the cost of providing the quarters and the outgoings for its utilisation. But if a similar proposal could be brought about with reference to the Soane Museum, would not the case be altogether different? We do not imagine for a moment that the Institute would seek to make a pecuniary profit out of such a transaction, but certainly there need not be any pecuniary loss. The endowment of the Museum is sufficient for its maintenance, and this not merely in its present useless form, but in such an improved form as to adopt it to the altered condition of our own day, and, indeed, to the progressive condition of modern art at large. Not only so, but the memory of Sir JOHN SOANE, as a trust not by any means to be ignored, would obviously be all the better cherished in advancing honour, and the many very valuable items in the catalogue of his possessions would be assigned the full importance which is due to his respect for them, as well as to their own undoubted value and interest.

The purpose which the endowment attached to this Museum specially serves would, we think, in any such arrangement as this, be followed out not in any indirect way, but in full accord with the founder's real motive. It would enable the Institute to provide, in the public interest, as there seems no other way of doing, accommodation and maintenance for the whole of an appropriate display of architectural and kindred objects, for which the SOANE collection and the Westminster collection combined would be an admirable foundation. Not an article of Sir JOHN SOANE'S need ever be displaced, not



even the mummy; the only difference so far would be that everything would be better displayed in more ample space, and under more authoritative patronage, and the name of the founder, therefore, more conspicuously honoured. We venture, with all possible respect, to commend the suggestion to the honourable trustees of the Museum for their most serious consideration as a public question.

## M. JULES LEFEBVRE.—II.

[BY A CORRESPONDENT.]

LEFEBVRE returned to Paris in 1867, bringing with him the last picture painted by him at Rome, *Cornelia, Mother of the Gracchi*, for which M. DE NEWERKERQUE, the superb Surintendant des Beaux-Arts, whose princely fêtes at the Louvre will be recorded among the *fastes* of the Second Empire, offered him the 6,000 frs. always paid by Government for the last *envoi* of a Prix de Rome. Two hundred and forty pounds is a sum not inconvenient in the purse of a rising artist, yet LEFEBVRE refused it because of other and more important work. He was desirous of paying a visit to his family at Amiens, whom he had not seen for five years. He took that opportunity of making the splendid portrait of his sister, which he exhibited at the Salon of 1868 with *La Femme Courbée*, which latter work excited a perfect furore. He drew his sister in black, the sleeves of her dress being of a transparent material. Thus the modelling of the arms is revealed. Her slight figure, blond *cédrée chevelure*, expressive eyes, and sweet smile combine to create an attractive portrait. The *fond de vert d'eau* contributes to show to advantage the gold-brown of the hair and the delicacy of the complexion.

*La Femme Courbée*, an infinitely difficult subject in technique, is correct and refined. She reposes on a couch, her right arm is rounded in the act of raising her hand to her lips, the left rests on the arm of the sofa, which is of an intense crimson, partially covered by a drapery of a lighter tone; her features are beautiful, her expression arch and yet sweet. The medal of the Salon was indubitably due to this work. At the first ballot five votes were given to COROT, five to LEFEBVRE, and two to BRION. The latter carried the day at the second ballot, partly in accordance with the desire of M. DE NEWERKERQUE.

In 1870 the picture familiar to most of us was exhibited with the portrait of *Mlle. Raimbeaux*. *La Vérité*, now at the Luxembourg, is the figure of a magnificent woman, who holds the lamp of truth above her head. The draughtsmanship is broad and academic, the modelling powerful. Instinctively one recalls *INGRES' Source*; but the latter brings before us a girl in all the fascination of extreme youth, whereas *Truth* is a woman who, with dauntless resolution, holds the lamp destined to sweep imposture, deceit, and all manner of hypocrisy from her path. "*Quand même Truth!*" is her cry. The rectilinear *audace* of the outline, the purity of the form, the warmth of the carnations, are reminiscent of the artists of the Renaissance period. Absolutely nude, *La Vérité* is absolutely chaste. At the Luxembourg it is hung near the portrait of a woman covered to her throat and attired in sober black. Of the two pictures, it is impossible to deny that the impression of purity is rather conveyed by the unclothed than by the clothed figure.

In 1872, besides the portrait of *Madame Claudon*, JULES LEFEBVRE exhibited *La Cigale*, one of the most enchanting of his works. The child-Jewess has danced all the summer, and, like the *cigale* in LA FONTAINE'S matchless fable, has forgotten that to summer warmth will succeed the chill blast of winter. Her gay apparel has been sold for a morsel of food. To keep out the icy wind, which drives with pitiless force against her tender limbs, there remains but a bright-hued scarf, a glittering bracelet, and the tresses of her raven black hair. One feels that the child's figure shivers, yet there is youth and life in the sparkling eye and ruby lips, so delicate in their curves. It was bought by Mr. LATHAM, and is now at San Francisco. *La Madeleine*, the property of ALEXANDRE DUMAS fils, was painted in 1876. Magnificent from a plastic point of view, the picture is yet painful because of the suffering it expresses. The attitude is that of despair. She is prostrate on the ground, partly resting against a rock in a corner by the edge of a lake. Her arms are raised above her

head in the anguish of her soul; she wishes for death, which refuses to hear her cry of agony. Mr. VANDERBILT purchased *Mignon*, so popular in the Salon of 1878. Intensely sad stands the child, her little skirt torn by the brambles of the thicket, through which she has plodded her weary way to the seashore; her wealth of dark hair is gathered in a scarlet kerchief to the top of her head; with wistful eyes she gazes across the water to the horizon, where lies the "Heimath" she fain would reach. Exquisitely delicate in execution and sentiment is this work, which made a sensation when exhibited. In 1880 *La Diane Surprise* caused the sharp contest between Mr. DUNCAN and the Government, to which we have alluded. In truth it is a superb work. ACTÆON is supposed to have appeared in the wood which fringes the river, in whose waters the goddess and her nymphs were bathing. The terrified dryads close round DIANA, who, indignant and defiant, stands, scorn expressed by her features and attitude. The crescent on her forehead marks her out from her surrounding attendants. Most beautiful are the figures kneeling in the foreground. Two on the left endeavour to veil DIANA'S exquisite form by drapery, which in reality serves as a *repoussoir*, whereby the faultless symmetry of her figure and the marvellous roundness of her limbs are made manifest. One still in the water, somewhat on the principle of the ostrich when he buries his head in the sand and believes that his pursuers cannot see him, covers her face by her arm. Three young maids crouch in the rear, sheltering their own lovely forms behind that of ARTEMIS. Light falls *en masse* from the left on the central group, while the nymphs behind the goddess are in half light. The winding river catches a gleam which turns a streamlet trickling from a rock to silver. At the Salon of this year, M. LEFEBVRE exhibited *Psyché*, now on its passage across the Atlantic to its future home in Philadelphia. The ideal the master defined on canvas is that of a human soul who has triumphed over temptation by her own simple purity, represented by a young maiden seated on a rock washed at its base by the waters of the Styx. A serpent is coiled on the shore, but does not approach the beautiful virgin; a star shines from above her forehead, and faintly illumines the scene. CHARON has not yet appeared to take her across, and restore her to earth victorious over the evil to which the jealousy of VENUS had exposed her.

We have now briefly noticed some of the works by which the artist has recorded his power of rendering on canvas the human form in all the chaste purity and divine beauty of its origin. A few words as regards M. LEFEBVRE as a host may have interest. His house, 35 Rue la Bruyère, resembles one of our London houses, inasmuch as its master is its proprietor; therefore it is not divided into separate habitations in *étages*, as is the common usage in Paris. The walls of the staircase are covered by original drawings, sketches, designs, &c. Among these life-size reproductions in black and white of BENOZZO GOZZOLI'S inlaid effigies of knights on horseback are noteworthy, inasmuch as M. LEFEBVRE copied these in the cathedral at Sienna from the originals incrusting in its floor. As one enters the *atelier* M. WALTNER'S *aqua forte* of GAINSBOROUGH'S *Blue Boy*, exhibited at this year's Salon, catches the eye. The easel at present bears a canvas whence *Morning Rises from the Sea*, as yet only *en ébauche*, still fresh, graceful, and pure. M. JULES LEFEBVRE has attained middle life. Tall, and of commanding presence, his fresh complexion, pleasant smile, and cheery voice, convey the impression of a man who has proved victorious in the battle of life, and who thoroughly enjoys his success. He makes his visitor feel at home at once, and with genial kindness will "talk shop." RAPHAEL and CORREGGIO are the masters whose works most powerfully influenced his mind during his five years' residence in Italy. "But what," he says, "surprised him at first on arriving in Rome, even more than the magnificent works of their genius, was the difference in the atmosphere, in the climate, in the inhabitants, to his past experience. Nature assumes a garb there in which I had never seen her." To study her in every phase, he believes, is more important to an artist even than her reproduction by even the master-minds of the past. From the study of nature to turn to their interpretation of her, is of real service to a student. Speaking of his own students he once said to us: "Artists are in these latter times trained on different lines to those followed in the Early Italian period. The students who crowded the *bottegas* of the BELINI, of MANTEGNA, of PERUGINI, lived in daily communication with their master. Wherever RAPHAEL moved, his



disciples followed him. Thus they imbibed his tone of thought as well as acquired his technique. Such training was possible then; life was more simple. M. BOULANGER and I have an *atelier* where some hundred odd students come to us for instruction. ROCHEGROSSE, whose *Andromaque* won Le Prix du Salon; TATTEGRAIN, who exhibited *Les Duellants*; RENOUF, who painted the *Wave*; SERGENT, HAWKINS, are among our pupils. As you will remark, each has his own idiosyncrasy. We do not desire to form a school. We wish to leave to each his individuality; but it was not so in the Florentine *bottegas*." In reply to an inquiry as to the lovely ascending form of *Aurora Kissed by a Zephyr* on the canvas to which we alluded, M. LEFEBVRE said: "I cannot tell you what that future will be. My idea changes many times before it fructifies into complete expression. I believe she will rise from the water, as it were, on the mists of early dawn." The figure, be it remarked, is marvellous as now painted, on account of the foreshortening from the waist upwards, in consequence of its ascending movement. *En passant*, M. LEFEBVRE spoke with reverence and appreciation of our National Gallery, and of the "science" which Mr. BURTON had manifested in the arrangement and classification of its pictures. He paid a passing tribute to GUSTAVE DORÉ's memory: "Ah! il était mon ami, c'était un vrai artiste." On an easel opposite to us was a portrait of the Inspector-General of the Ponts et Chaussées, the habit of command very clearly given, and with this a certain haughtiness intensified by the Roman character of the features. "I constantly paint portraits in order to study nature at the fountain head. It is the study of nature alone which enables a man to idealise," remarked M. LEFEBVRE. He showed a photograph of *Fiammetta*, purchased by the Emperor of AUSTRIA. She was daughter, he said, of ROBERT of Naples, remarkable even among the VITTORIA COLONNAS and BIANCA D'ESTES of her time for learning and genius. "I selected her," he added, "to paint, as contrasting her type with that of *Ondine*," pointing to a lovely creation of his poetic fancy. The water *naïade* stands almost up to her knees in the clearest water, which by no means conceals her feet; her right hand is raised over her head to gather the moss which *tapisse* the rock against which her supple form rests. Her left hand grasps a tail of her golden *chevelure*, wet with the spray of trickling water. Full light falls on part of her beautiful form, while the rest is in soft shadow. She looks at you with deep, serious eyes; the curves of her half-smiling lips are exquisite. Cool breezes cause the water surface to ripple. The picture conveys the sentiment of repose.

Mr. VANDERBILT asked M. LEFEBVRE to paint a subject to fill a given space in his New York mansion, requesting that there should be five figures in the composition, and leaving the price of the work to the discretion of its author. Under these pleasant conditions M. LEFEBVRE, *con amore*, painted *La Fiancée*. The bride, sculpturesque as are Greek maidens, attired in her *chiton*, is seated on an antique chair; an attendant, as beautiful as herself, arranges her veil; her sister kneels before her, looking sorrowfully at her bridal adornments; while two younger children, the one holding her hands behind her, watch the scene at the door of the chamber. The scene takes place in Athens, and is of the PERICLES period. Useless is it to remark that every accessory is strictly correct. The tripod on the right is drawn from one now in the Louvre. The individual beauty of the girls' features as well as figures, the exceeding purity of their type, is what is most striking in the photograph, which, however good, never conveys an idea of painter's work.

A charming child of some seven summers, drawn in profile *caiffé* with a KATE GREENAWAY red bonnet, and standing against a *vert d'eau fond*, occupies the post of honour in the very centre of the studio. The child has features of exceeding refinement. The artist has lingered over the delineation of those cherry lips, of that delicately-arched nostril, and of those deep dreamy eyes, with more than ordinary carefulness. The face is almost painted in miniature, yet it is life-size. To the cloak the artist gave scant attention, simply sketching its outline on the canvas, which chanced to be gray. We inquired who this young person might be. "C'est ma fille," replied the father.

**Battersea Bridge** has been declared to be in a condition that renders it unsafe for vehicular traffic, and it is to be open for foot passengers only.

## STUDIES OF SOME LONDON CHURCHES.

(Continued from page 50.)

THE Church of *St. Matthew*, near the Brixton Station, is one of those buildings erected about the same time as *St. Pancras*, Euston Road, when Grecian architecture was the rage. The architect was PORDEN, who carried the work out in 1824 at a cost of 22,000*l*. The style is Doric, and externally the structure is of freestone throughout, and, according to BRAYLEY, "ranks with the best Classical buildings in that (*i.e.* Grecian) style." According to the taste of the present day, there is little to admire in it, while it is, moreover, internally very unchurch-like. The best part is the coloured decoration, which has been effected of late years. It seems curious that a church which cost so much should now be so little known, but its style, as has been said, is not fashionable.

The next church to be commented upon, *St. James's*, Bermondsey, is also Grecian in style, but of the Ionic order, and erected five years later than the building just mentioned. It is plainer, constructed of brick, freestone being only employed for the dressings. The best thing about the exterior is the spire. Entering the church, the effect is good, as there is plenty of height. But a great desideratum is painted glass or some decorative colouring, to take off the chill appearance. There is a flat and deeply-coffered ceiling divided into square compartments, with bold-panelled beams forming it into bays. The nave is of good width, and the galleries treated constructionally, the columns which support them resting on square-moulded piers. But, unfortunately, the gallery front is bellied out (there can be no better term than this to express the meaning, as every architectural tyro knows what is meant by a double-bellied baluster) in so remarkable a manner that the base-mouldings of the upper range of columns, level with the gallery front, die into it instead of standing free, as they ought to do. The chancel is nothing more than a recess opened into by a semicircular arch. It would certainly by no means injure the design if a properly arranged constructional chancel were added.

In *Allhallows*, London Wall, is an example of a church built during that dead era, as far as church feeling is concerned, the eighteenth century. For it was erected in 1767 from the designs of G. DANCE, jun. There are no side galleries, and the building is of fair proportions, but, as might be expected, destitute of a constructional chancel. No east window exists, but a kind of apse concha recess, which has some very tame-looking panelling to it. Pilasters supporting the arched ribs of the semicircular lath-and-plaster ceiling of the nave divide the composition into bays. External light is admitted in the ordinary and clumsy mode of the churches built not only at this date, but in WREN's time and by his school—*i.e.* a piece is cut out of the barrel ceiling and a window squeezed into it. How much inferior this device is to the mediæval method adopted in groining has been commented on before in these "Studies." The decoration to the ceiling consists of *appliqué* ornamentation. The large space of plain wall under the windows has its sameness broken by several monumental tablets. For a few moments let us take this church as a text, and from it deduce a lesson. As a piece of architecture it is almost more interesting than the Sistine Chapel at Rome, which, of course, depends entirely on its paintings by MICHAEL ANGELO. Were *Allhallows* properly glazed with grisaille or painted glass, a mellow light from above would fall on the interior. The representation of Our LORD in majesty might be painted in distemper or executed in mosaic, while some simple subjects from the sacred writings might be depicted on the nave ceiling. If the choir were raised slightly, so as to make a proper chancel arrangement, now wanting, with a chancel screen, as at a neighbouring church, the effect would be good. The west gallery might serve as an organ-loft, the church being so small that no inconvenience would be caused by the distance between the choir and the organ; in fact, in a short church no better place for sound could be found for the instrument. Mr. POPPLEWELL PULLAN (no mean authority on the subject) has expressed the opinion that these City churches might be made quite beautiful by the aid of colour. The Rev. EDWARD CUTTS also, in a paper read before the Institute of Architects some years since (to which the writer has before referred and commented on in these columns), ably expatiated on this view of the subject at a time when colour was far more rare than now in ecclesiastical architecture. People were then dread-



fully afraid that the attempt was being insidiously made to drive in the thin end of the wedge, make a series of Saint Chapelles in old England, and ultimately Romanise us all. Happily we can afford to smile at this chimera. It is pleasant to see how, in churches where evangelical views are held, that precious gift of God to man, the art of bringing colour as a handmaid to architecture, has progressed. When entrusted to able hands the bare walls have commenced to glow with colour and imagery, perhaps with angelic figures, banishing the dull tones of heaviness, and lighting up the temples of the Almighty with one of the most appropriate offerings it is possible to render to Him. Last, not least, low open benches might fitly take the place of the present pews, which are not the fine dark ones such as are found in some of WREN'S churches, but quite modern.

Not far off may be noticed the *Church of SS. Augustine and Faith*, almost under the great shadow of St. Paul's. This structure was considerably altered not long since; though the south and west galleries have been removed (only the small one on the north side being left), scarcely any space for worshippers has been lost, as almost an equal amount has been gained by throwing a large west lobby into the body of the church. Nevertheless, some degree of that dignity—so impressive in City churches—must have been lost by the abolition of the vestibule, a feature as characteristic of Wrenian churches as the galleries. It is a grave question whether, architecturally, these buildings benefit by "modern innovations." It is true that the rearrangement of churches of the type of the last-mentioned has been advocated; but there is a difference of nearly a century between the erection of SS. Augustine and Faith, and of Allhallows, London Wall. It is difficult, too, in the nineteenth century, to feel quite so conservative about buildings put up almost within the memory of man, as compared with the productions of WREN. It is curious to inquire whether the men of the twentieth century will have affectionate solicitude for the church architecture of the eighteenth, so decried by the present generation, when the fashionable styles of to-day will perhaps be thought beneath contempt. There is another church designed by WREN a stone's throw off, as yet unrestored, with high dark oak pews. It is believed that no such oak pews existed at SS. Augustine and Faith previous to the recent works, though there is little doubt that such were there in previous years, but swept away by the ignorance of former authorities. Low open benches, however handsome and appropriately designed in character with the churches in which they are placed, do not satisfy one's notion of the fitness of things. It is difficult likewise to admire the painting of an old oak reredos a kind of chocolate oak tint, though the gilding and the tempera colouring of scriptural subjects, such as the Ascension, are far more appropriate decorations to the east end of a church than the printed Creed, Lord's Prayer, and Commandments. It is, and always will be, a crucial point as each generation succeeds another, to know how to begin and where to stop in alterations, innovations, or adaptations to old buildings to meet the requirements of the times. No two men, even though experts, will be perfectly agreed on a matter which must necessarily depend upon individual niceties of taste and feeling. It is only possible to lay down broad general rules, elastic to a limited extent, and even then it is difficult to know who are the proper authorities on delicate points. Now it appears to the writer—to instance but one example of what is right in such cases—that the retention of the framework and main design of reredoses erected some 200 years ago, when ideas in ecclesiastical architectural decoration were very different to the present day, is as much as can be conceded to archæological principles. The substitution of the thought and pencilling of the devout artist in lieu of sentences stuck up like notice boards—very suitable when prayer books and Bibles were scarce and expensive—is a vast improvement. The illustrated and picture advertisements in the streets are really more decorative! However one may reverence the inspired words of Holy Writ, or the Apostles' Creed, the printing them up in our churches at the present day is an anachronism. Returning to the Church of SS. Augustine and Faith, the cathedral glass tints and patterns of the new glazing are rather too conspicuous and bright to please; they are out of tone with the church—too "fussy"—and something of a quieter character would have been more suitable. But we are quite right to avail ourselves of that beautiful material (cathedral rolled glass), which WREN would doubtless have used had he had the chance. It is to be regretted

that instead of metal standards to the altar rail, twisted oak balusters of the old Wrenian character had not been used. It is a question whether the moderns have the advantage over the seventeenth-century men in this respect. At the risk of being hypercritical, it must be said that the brass gaseliers are rather too Gothic in feeling, and if less demonstrative would have been more effective.

Some alterations, comparatively recent, have been made to the *Church of St. James's*, Piccadilly. The west vestibule has been thrown into the body of the building, and now forms a baptistery, which is better, architecturally speaking, than blocking up this spare area with fixed benches. The accommodation afforded by the galleries could not, of course, be spared in a church situated in such a thickly-populated parish in the very heart of London, where the rectory is generally supposed to be the stepping-stone to a bishopric. If the galleries were taken down the architectural character would be much altered, for their fronts in effect form an entablature on which a second order is mounted. The manner in which a semicircular arch is turned from pier to pier is pleasing. This has a better appearance than that often adopted by Sir CHRISTOPHER WREN in other churches, where the pseudo-clerestory window is cut out of the nave ceiling, and there is a plain flat one to the galleries. On the other hand, the long lintel looks weak, if one did not know that this lintel was all timber work covered with lath and plaster. It is much to be hoped that at no distant date the fine ceiling of the nave may be properly decorated in colour; it now looks very cold. The semicircular ceiling, walls, and gallery front are all one expanse of white. The pews, of moderate height, remain as in times past, and do not cry for change.

The unfinished *Church of St. Michael*, Woolwich, has a noble vaulted chancel, forming an admirable instalment of the building hereafter to be erected. There is, however, a small matter of detail in the flooring which might have been better managed. The site was limited in length, and it was much desired to well elevate the altar. In order to get over this difficulty steps rather higher than usual in such instances were designed. What is the consequence? The scale of a really lofty interior is diminished, and the ascent to the kneeling step made more difficult for elderly or infirm communicants. The architect has adopted a feature not often seen in modern work, but which is sometimes helpful. Shaft has been set over shaft in the east window. There is mediæval precedent for this in the nave of Romsey Abbey Church, and in other ancient examples.

(To be continued.)

## PARIS NOTES.

THE competition for the Prix de Rome section of painting has resulted in the victory of M. Marcel Baschet, a youthful pupil (he is not twenty-one years of age) of MM. Boulanger and J. Lefebvre, who carries off the grand prize. To M. Friant, born in 1865, and a pupil of M. Cabanel, and to M. Lambert, aged twenty-nine, who has studied under MM. Cabanel, Bin, and Lequien, have fallen respectively the first and second "Deuxièmes Grands Prix." As already announced in *The Architect*, the subject selected this year was *Œdipus Cursing his Son Polynices in the Presence of his Daughters Ismene and Antigone*. Out of the ten aspirants admitted to take part in the final stage of the competition, six were pupils of M. Cabanel. The general impression produced by the works, as a whole, was unfavourable, the critic, who inspected them when exhibited at the Ecole des Beaux-Arts last week, seeming to consider them below the average. A few, however, undoubtedly show considerable talent, and little fault can be found with the decision of the jury. The grouping of the figures in M. Baschet's picture is excellent, the colouring rich and warm. The sightless Œdipus stands erect in a dignified attitude, clasping one daughter to his breast with his left arm, while the right emphasises the malediction hurled at his son. Polynices cowers beneath the curse, whilst his remaining sister has sunk overcome at her father's feet. Altogether M. Baschet has grasped the spirit of his theme, which he has handled in a manner that augurs well.

In the sculpture section of the same competition M. Lombard, a pupil of M. Cavelier, and "Second Grand Prix" last year, has taken the Grand Prix. The first "Second Prix" has fallen to M. Puech, a pupil of MM. Jouffroy, Falguères, and Chapu, who carried off the second "Second Prix" in 1881, while M. Verlet, a pupil of M.



Cavelier, takes the third place in the list of honours, the present being the first occasion on which he has received a prize. The subject this year, it will be remembered, was a passage from the "Anarcharsis," describing the *Death of Diagoras*. He has just witnessed the triumph of his two sons in the Olympic games, and, crowned with the wreath they have won, is being carried among the applauding spectators, who shout, "Die, Diagoras, there is nothing left for you to covet!"

In the Architectural Section the ten competitors have just quitted their *loges*, after no less than 110 days' work. The subject given was "A Necropolis to contain the Sepulchre of the Founder of a great State, together with those of his Successors and eminent men who have rendered great services to their Country." The following are the names of the young architects engaged, in the order of their admittance to *loges*: (1) Redon, pupil of M. André; (2) Quatesons, pupil of M. Pascal; (3) Gonvers, pupil of M. Guadet; (4) Bergon, pupil of MM. Vandremere and Rollin; (5) Zobel, pupil of MM. Zobel and André; (6) Fontenelle, pupil of MM. Moyaux and André; (7) Devienne, pupil of MM. Coquart and Guérard; (8) Legrand, pupil of M. Pascal; 9. Maillard, pupil of M. Guadet; (10) Defrasse, pupil of M. André. Their work is being exhibited at the Ecole des Beaux-Arts during the last four days of the present week, and the definitive judgment will be delivered this day (Saturday).

Important works are at present being carried out for the enlargement and consolidation of the French Ministry of the Interior. The buildings now occupied by this Ministry are decidedly the most incomplete and badly-organised of all the Government offices. Not only is the numerous staff sadly cramped and crowded into flow, dark, and badly-ventilated rooms, but, owing to want of space in the Place Beauveau, some of the many services attached to the department are scattered about in different quarters of the city—in the Rue de Bellechasse, Rue de Grenelle-Saint-Germain, Rue de l'Université, &c. In order to put an end to this state of things, four large houses situate in the Rue Cambacérès, and another in the Rue des Saussaies, have been expropriated by the State, and are now being incorporated in the department. Although these buildings are not to be pulled down, their internal arrangement is being entirely altered. Communications with the central office, close by in the Place Beauveau, will be established by means of underground galleries. The work is expected to require nearly six months for completion.

A meeting of the managing committees of the various workmen's Chambres Syndicales was held last Monday at the Salle Harel to determine what trades should be officially represented at the Amsterdam exhibition. It was decided that sixty different trades should send delegates, and the total number of the latter was fixed at seventy, to several of the corporations—that of the bronze-workers, for instance—being accorded the right of having two representatives. A list of the elected delegates has been sent into the offices of the Municipal Council for approval, that body, it may be remembered, having voted a sum of 35,000 frs. towards their expenses. This sum will give about 30 frs. per head, a very fair allowance, considering the comparatively inexpensive nature of the journey, and that special arrangements are to be made in Amsterdam for the economical accommodation of these favoured representatives of French industry.

M. Alphand, the Paris Commissioner of Works, has ordered the adoption of the following measures for the improved cleansing of the city drains. A system of sluices is to be established by means of tanks containing 10 cubic mètres of water placed along the top of the drains at distances of 280 yards. The whole of these reservoirs will empty themselves instantaneously in the course of the twenty-four hours, gangs of men following each sluice with a view of sending down any matters that may still remain after the passage of the water. The length of the drains, to which this method of cleansing is to be applied, exceeds 265 miles. The central system of collectors is to be completed in order to relieve those in Clichy and Montmartre districts, which are now overcharged, and a total volume of 400,000 cubic mètres per day is to be provided for. Finally, the Government will be called upon to take measures against the filtration of the impure drainage water into the Rivers Seine and Marne throughout the departments of the Seine and the Seine-et-Oise. In addition to these measures, a committee has been appointed to study and report upon the best method of deodorising the drain water.

A new instrument, the "chrono-tachymètre," invented by

M. Louis Pouget, an officer of the Legion of Honour, for registering the speed of trains, appears likely to be adopted by all the great French railway companies. The apparatus has been submitted to severe tests, and is found accurately to perform its functions by following the movement of one of the wheels and printing the results on a scroll of paper.

On the front of No. 9 Rue Soufflot, a white marble slab has just been placed bearing an inscription: "The walls of the City of Paris, built during the reign of Philip-Augustus, about the year 1200. Site of the Porte Saint-Jacques." A representation of the gate is also on the slab.

Under the lately-proved will of Madame Laboulbène the Académie des Beaux-Arts received the sum of 70,000 frs., the revenue of which is to be divided each year among the ten young artists admitted to enter *loges* for the Prix de Rome in the section of painting. This year's competitors will, under this legacy, receive the sum of about 10½ apiece.

The demolition of the Tuileries ruins is entering upon its last phase. The Pavillon de l'Horloge, the work of Philibert Delorme, has been attacked this week, and a fortnight hence this last remaining fragment of the palace will have disappeared. It is expected that the clearing of the site will take another five or six weeks, so that October will be near before the work of excavation of the cellars and other underground portions of the building can be undertaken. Considerable curiosity exists as to whether any of the treasure reported to be buried under the old Palais des Tuileries will be found.

### THE ASHBURNHAM MANUSCRIPTS.

MR. E. J. POYNTER, in a letter to the *Times*, writes:—Is it too late, now at the eleventh hour, to make another appeal against the decision of the Government in the matter of the Ashburnham Manuscripts?

The English portion of the collection—that part, that is, which bears on English history—has required no advocacy to determine that its national home should be the great English library; it has been taken for granted that no Government could venture to refuse such an acquisition, and there has apparently been no hesitation in coming to an agreement on the concession made by Lord Ashburnham in dividing his collection.

But it is probable that the extraordinary artistic value of that portion of the collection called the Appendix, which contains, with one or two exceptions, all the illuminated books, is less widely appreciated than it ought to be. The selection from these books which has been for some time and is still on view at the British Museum, has naturally been visited by but a limited number of persons, many of whom were artists, and others who, like myself, were amazed at the wealth of beautiful design and exquisite workmanship revealed to them; but there were also, doubtless, many who were stimulated only by curiosity in a subject which was for a short time the talk of the day, and who can scarcely be considered as deeply interested. Some even may have gone with a preconceived conviction that admiration for these works is an idle taste, which it is not the business of Governments to encourage when they have so many better ways of spending money; and it is doubtless one of the difficulties attending any attempt to urge expenditure on works of art that their value is not demonstrable, while the claims of documents are easily argued. As a matter of fact, however, it is of less importance to possess the originals of State papers and historical documents which can be copied and printed, than to secure and retain for the nation treasures of art and skill, of which no reproduction can give more than a faint impression.

Yet, among the Italian illuminated books alone are two which would be worth securing at any price, even if they were offered to us from abroad. That the enthusiasm of an English collector should have already brought them into this country would seem an additional reason for securing them a permanent place in the national collection. The first, a series of pictures of the fourteenth century illustrating the life of Christ, is a treasure of design hardly less valuable in the history of art than the well-known series by Giotto in the Arena Chapel at Padua. Painted by an unknown artist, they have all the grandeur of style to be found in the great fresco painters of the time, with an original treatment, which shows independent observation of nature and abandonment of tradition. The other is the unique Albani manuscript, which is rendered famous by the full-page miniatures by artists of historical fame—Aspertini, Lorenzo di Credi, Francia, and Pietro Perugino. These miniatures, perhaps, were an uncongenial task to the painters who were in the habit of doing works on a larger scale; for, although the *Annunciation*, by Lorenzo di Credi, looks like the work of a hand not unaccustomed to the delicacy of illuminated work, that of Amico Aspertini is the only one which is fully worthy of a painter



of reputation, while the one by Francia is decidedly bad; but any shortcomings in the designs which give the book its historical value are fully made up for by the numerous exquisite paintings by an unknown hand which adorn the calendar at the beginning of the book and are scattered through the text. One half-length figure of Santa Lucia will remain fixed in the mind of any artist who has seen it as a gem of unrivalled beauty. I may name yet a third book in the style of Attavante, which is a work of skill and beauty and fanciful design, such as could only be produced in Florence and at the culmination of the art of the quattro cento period.

Three English books stand out, perhaps, in equal prominence; one of the fifteenth century being, probably, unique for the finish and beauty with which the subjects are executed, and showing that an independent school of great distinction existed at that time in England. But a critical catalogue of the books would be out of place. I mention these as masterpieces probably unrivalled, except by one book of Hours, a miracle of art, in the same collection, but which, being, unfortunately, among the Libri manuscripts, the Government are pledged not to buy for the museum. What I have said is sufficient to indicate the artistic value and historical interest of the collection.

It is obviously impossible to get up a popular excitement on such a subject as this. It is one which necessarily interests a limited class—more limited, perhaps, than, with our boast of artistic culture, we like to admit—and I will not stop to argue that this limited class is, perhaps, the one which deserves most consideration in these matters. But there is a point to which I should like to draw the attention of the general public, and through it, perhaps, of the Government or Treasury officials who dispose of these questions for us; and that is, that the treasures which past generations of enlightened and cultivated Englishmen have brought into this country, and which, through the nature of things, have been only partially accessible even to the most interested connoisseurs, are now from time to time coming into the open market; and that there is therefore now an opportunity for public spirit to appropriate for the elevation of public taste what private enterprise gathered in for the gratification of individual taste. The present opportunity is in some respects unique, and the price asked—45,000*l.*—the same amount as is proposed for the Stow portion of the collection, appears not to be excessive, and not above what could be obtained for the Appendix in the auction-room. Be this as it may, I am inclined to hold with the distinguished French critic, M. Oliver Rayet, that “un musée ne doit pas hésiter à payer, même trop cher, les objets hors ligne,” always supposing, that is, that they cannot be obtained for less.

It is impossible to forget to mention only one instance, the dispersion of the Meyrick collection of armour, in itself almost a national museum, offered to the Government for a sum so small that one suit alone, it is said, was afterwards sold for a nearly equivalent amount. The Hamilton manuscripts were not even offered to the Government, probably because there was no chance of any offer being entertained; so that the invaluable Botticelli illustrations to Dante left this country to be straight caught up by the more enlightened dispensation at Berlin—the whole library being bought probably for the sake of this one unique book. Indeed, if all the collections worth having which have been offered to the Government within the last twenty years had been bought, the addition to the national expenditure would have been hardly appreciable; and who regrets the 70,000*l.* which were spent on the Peel collection for the National Gallery, one of the rare instances in which the Government of the day took advantage of an offer?

### THE PROTECTION OF THE MONUMENTS OF CAIRO.

**A**MONG the minor questions which Lord Dufferin has wisely included in his general revision of Egyptian affairs, the protection of the monuments of Cairo deservedly holds a prominent position. It is known, says a writer in the *Times*, that His Excellency has already suggested to the Khedive's Government a scheme for their better preservation, and that the scheme will probably embrace alike the ancient monuments of the Nile valley and the Mediaeval architecture of Cairo. This comprehensive view is clearly the simplest and wisest mode of dealing with the historical and artistic interests of Egypt; but it is the first time that the Arab monuments have been held worthy of a place beside the remains of ancient Egyptian art. The monuments of the Pharaohs and Ptolemies have naturally excited the greater interest, and have been proportionately better cared for. Till late years, however, this care has been altogether inadequate. Tourists have been suffered to chip off pieces of inscriptions and statues, and to blacken the sculptured walls of tombs with their ruthless candles and torches; and even the leading explorers and scholars have joined in the work of spoliation, and thought more of enriching the museums of their own countries than of the lamentable gaps they left in Egypt itself. Even now, though M. Maspero is as vigilant and single-minded as could be desired, his staff and his powers are not sufficient adequately to control the vandalism of travellers.

To lovers of the ancient monuments, therefore, Lord Dufferin's proposal of an archæological police will be very welcome. But to students of Arab art his reforms will seem even more important. The mediaeval buildings of Cairo have in recent times suffered infinitely worse treatment than the ancient temples and tombs. They are built, and often very badly built, of perishable materials; some of their finest decoration is in stucco and wood, while that of ancient Egypt is carved in limestone and granite. Thus with Arab art the agency of natural decay was added to the neglect and wanton destruction of man. Nothing but constant and skilful repairs could have preserved the monuments of Cairo in their original perfection, though it may be doubted whether any skill could have resisted the action of time upon many of their most beautiful and delicate decorations. The attempt, however, was not made, for the funds with which they were endowed by their pious founders were confiscated early in this century by Mohammed Ali, and since then no one has shown himself inclined to keep up at his own expense monuments which were dedicated to the memory of some one else. It is very probable that the endowments were misappropriated before their confiscation by Mohammed Ali, and it is certain that the present deplorable condition of most of the mosques presupposes centuries of neglect and indifference. The pious zeal or personal vanity which prompted their erection evidently died with their founders, and subsequent generations preferred building new monuments in their own honour to preserving those which were erected in honour of their ancestors. It is the way with all Eastern architectural ambition. Whatever the cause of the present state of the monuments of Cairo, the result is the same. Whatever is to be done now will be done at least a century too late. It is now impossible to restore the mosques and the other exquisite vestiges of the Mameluke era to their pristine beauty, and most of the rich decoration of the interiors is gone for ever. They have been allowed to travel too far on the road to destruction. All that can now be done is to preserve them in their present condition as long as possible with the help of every resource of science; to repair such portions as admit of being repaired, while allowing no rash restoration; and to copy, cast, squeeze, photograph, and survey them while they yet stand, and thus preserve their plans and decorations in some form or another before the originals, in the natural course of things, built for a time and not for ever, gradually decay and disappear. If Lord Dufferin can attain this much he will have performed an immense service to art. When it is stated that there are now in Cairo 315 large mosques, 191 chapels, 294 sacred tombs, 200 *sebilis*, or fountains, 35 mosque schools, and 18 hospices, to say nothing of the noble monuments comprised in the extra mural cemeteries of Kaït Bey and the Kerâfeh (called by Europeans “Tombs of the Khalifs” and “Tombs of the Mamelukes”); that these thousand monuments represent what is vaguely termed Arab art in its purest form, free alike from the excessive elaboration of Alhambra, and from the grotesque forms and ornamentation of India; that they trace the history of this purest form of Arab art from its early phase (omitting the nondescript mosque of Amr) under Ibn Tulûn in the ninth century of our era, through the characteristic epochs of the Fatimite Khalifs and of Saladin, to the golden age of the Mameluke Sultans and the prince of Cairene builders, Kaït Bey, in the fifteenth century, and then through its gradual decay, under Turkish rule, to the monstrosities of the present century—it will be realised that the preservation of so continuous a series of monuments must be an unspeakable gain to students of art. How beautiful and unique these monuments are those who have visited Cairo repeatedly and for long periods can alone fully appreciate. There is but one voice among artists and archæologists as to the imperative necessity of preserving them.

It is fair to say that this necessity has of late years been recognised by the Egyptian Government. A commission was appointed at the end of 1881 for the special purpose of protecting these monuments, and it includes the names of such well-known admirers of Arab art as Rogers, Artin, and Franz Beys, and MM. Bourgoing and Baudry, besides the Minister of Vakoufs and other officials. Its work was interrupted, after a preliminary meeting, by the late troubles, but it has since resumed its functions with renewed zeal. There appears to be some misconception in England as to the character and work of this “Commission for the Preservation of the Arab Monuments of Cairo.” It has been insinuated that the Commission is not only inoperative, but that it is positively in league with the destroyers of monuments. Recent reports from Egypt, however, tend to show that such suspicions are wholly without foundation. The Commission is working hard, and working in a scientific and intelligent manner. It has appointed two sub-committees, one of which is intrusted with the task of drawing up a complete inventory of the Arab monuments (and has already registered between seven and eight hundred of them), while the other is instructed to visit the various mosques, tombs, fountains, &c., which, upon information received, appear to be most urgently in need of attention, to report upon their condition and recommend the proper steps to be taken for their preservation. Once a week this sub-committee makes an official tour of inspection, visits a series of monuments, decides whether they are capable of preservation or not, and in the former case



reports on the best means of preserving them. If a monument is so wholly ruined that preservation would be both useless and impossible, the Commission removes any fragments of tracery or mosaic, or other objects of interest that may be found among the ruins, to the new Museum of Arab Art, which is being formed in the eastern cloister of the mosque of El-Hâkim, where already a goodly collection of fine specimens of wood-carving, brass and silver-work, mosaics, tiles, enamelled glass lamps, bronze-plated doors, coloured glass and stucco windows, &c., has already been brought together. The recommendations of the sub-committee are not only sent in, but carried into effect; and, with a view to public criticism and surveillance, the reports are regularly published by Rogers Bey in the *Moniteur Egyptien*. Every monument which the sub-committee has decided to be worth preserving is forthwith in general committee declared an historical monument, and from that moment forward no power can touch it, no new road can be opened through it, and no surveyor can dock it to suit the prevailing notion of regulated street frontages. In accordance with the recommendations of the sub-committee, falling walls, arches, and towers are propped up with buttresses or beams, ruined gateways are repaired, modern encroachments on monuments are cleared away, and scattered fragments of ruined monuments are taken to the Museum of El-Hâkim. Not only are the known monuments cared for, but others previously unsuspected are discovered in the official tours of inspection. Only last month the sub-committee unearthed the family tomb of the Abbaside Khalifs of Egypt, and every inspection brings to light something novel and interesting to the student of Arab art and the history of mediæval Egypt. Whatever is thus discovered is at once recorded and described in the archives of the Commission; but while every precaution is taken to identify, preserve, and record the historical and artistic monuments of Cairo, no attempt is made at restoration. Those who know what restoration means in Cairo will appreciate at its full value this prudent reserve.

Here, then, we see at last the beginning of a proper treatment of the Arab monuments. Thanks chiefly to the energy, learning, and zeal of Rogers Bey, the Commission is working well and on the right lines. Lord Dufferin has here an instrument ready to his hand, and his efforts will doubtless be directed chiefly to strengthening the hands of the Commission. He is well aware that to be effectual the Commission needs to be furnished with additional powers. For example, it can declare a building an historical monument, and thereby protect it from all direct attacks; but its power does not extend to indirect aggression. Many mosques depend for support to some extent upon the surrounding houses, and the demolition of a house over which the Commission has no control may result in the destruction of the mosque. The prime agent in such demolitions is the present code of urban regulations, by which the width of streets is fixed at so many mètres, while a level frontage is required at the cost of every building that projects too far into the street. Whatever is supposed to interfere with the rapid passage of the two-horse open cabs with which Cairo is now infested must be swept away, according to the present tasteless system. The city is full of evidences of the havoc wrought by this *alignement* regulation, and if it is not immediately checked the injury done to many of the finest monuments will be irreparable. Lord Dufferin's first step should be to limit the power of the Minister of Works in the matter of this *tanzim*, or street straightening, and to give the Commission power to prevent indirect as well as direct injuries to the monuments. The members of the Commission need no instruction in the importance both of registering and of propping up, and otherwise preserving the Arab monuments; these are their chief aims at present, and they are pursuing them with success; but besides these there are other points to which their attention will probably be directed. One of these is the appointment of a trustworthy body of guardians for the monuments—an archaeological police, who, unlike the present *bou-wahbs*, should be above the influence of baksheesh at the hands of depredating travellers, and who should receive fixed salaries and charge fixed entrance fees, which should be self-registering. Another important point is proper representation of the monuments by means of surveys, drawings, photographs, casts, &c., while yet such preservation is possible, so that any monument could be accurately reproduced from the data thus recorded. A third point is the organisation of the Museum of Arab Art, and the appointment of a competent curator, who should be able to inaugurate a school of Arab design. It must be added, however, that, considering that the museum is quite in its infancy, the Commission has effected a great deal of admirable work in it in an amazingly short time.

One very serious consideration remains. The members of the Commission are for the most part busy men with enough official work to do without their honorary services on the Commission. If the powers and functions of the Commission are increased, it is not easy to see how the members can find time to exercise them. What is wanted is a body of men who can give their undivided attention to the work which has been so ably begun. Of all countries in the world Egypt would appear to be the one in which a Ministry of Fine Arts would be most obvious and appropriate, and there is no reason why the creation of such a department

should throw much additional expense on the Treasury. It would only be necessary to make the Director of Archæological Research and head of the Boulak Museum one and the same person with the Minister of Fine Arts, appoint an under-secretary for Arab art, and establish a competent staff of surveyors, inspectors, and clerks. By levying a fixed entrance fee on all visitors to public monuments, ancient and mediæval, the cost of administration would easily be repaid; real students of Egyptian and Arab art would gladly submit to the imposition of an extra charge, and tourists would be indifferent to a small increase in the national custom of baksheesh. A Ministry of Fine Arts, holding control over all the monuments of Egypt, would meet every requirement, provided the staff were mainly European and properly trained, and there are already enough students of ancient and mediæval Egyptian art to remove all doubt on that score. If such a Ministry does not form part of Lord Dufferin's scheme, it may at least be hoped that his scheme will lead up to it in the future.

### THE BRITISH ASSOCIATION.

THE arrangements for the meeting at Southport are nearly complete. The address of the President elect, Professor Cayley, will be delivered in the pavilion of the Winter Gardens, which is set apart for the use of the Association. Cambridge Hall is named as the reception-room, and the sectional meetings are appointed to be held in the Town Hall, Art Gallery, and other places not three hundred yards distant. The business will open on Wednesday, September 19, with the President's address. On the following day, besides the sectional work, there will be a soirée in the Winter Gardens. The next day (Friday) has for its special feature the address of Professor Ball, Astronomer-Royal for Ireland. Saturday afternoon is to be devoted to excursions to Lathom House, Knowsley, Ince Blundell Hall, and the Liverpool Docks. On the evening of this day Sir F. J. Bramwell is to give his lecture to working people. On the Monday following Professor M'Kendrick, of Glasgow University, will give the general lecture, and on Tuesday the second soirée is to be held, also at the Winter Gardens. The formal business closes with the general meeting on the afternoon of Wednesday. For Thursday excursions are proposed to Haigh Hall, the seat of the Earl of Crawford and Balcarres, the Wigan Coal and Iron Company's Works, Stonyhurst College, Whalley Abbey and Clitheroe, Furness Abbey, the Lake district, the glass and chemical works at St. Helens, and the Abram Colliery. The presidents of the working sections are as follows: Mathematical and physical science, Professor Henrici; chemical, Dr. J. H. Gladstone; geology, Professor W. C. Williamson; biology, Professor E. Ray Lankester; anthropology, Mr. W. Pengelly; geography, Lieutenant-Colonel H. H. Godwin-Austen; economic science and statistics, Mr. R. H. Inglis Palgrave; mechanical science, Mr. James Brunlees. Mr. Threlfall, of the Local Committee, has charge of the Mayor's special fund of 100*l.* for promoting the attendance of working men by enabling them to purchase the associate's ticket at half price. It has also been arranged that a portion of this amount shall be expended in bringing over working men to hear Sir Frederic Bramwell's address. Already in response to the Committee's invitation a large number of exhibits are promised for the soirées. This important division is under the superintendence of the Chevalier de Stoess and Mr. Alfred Morgan. Authors of memoirs are reminded that August 22 is the last day for sending in their papers to the general secretary.

### METROPOLITAN IMPROVEMENTS.

THE Metropolitan Board of Works on Tuesday arrived at some important resolutions in regard to the powers they will seek from Parliament in the next session. It has been unanimously determined to ask the sanction of the House of Commons for the construction of a low level bridge across the Thames immediately eastward of the Tower. Sir Joseph Bazalgette has been instructed to prepare designs for this undertaking, in substitution of the plans for a high level bridge, which he submitted some months ago. By a sufficient majority, also, it has been resolved to seek powers to construct two great tunnels under the River Thames, easily available for all kinds of traffic. The points selected for the construction of these important works are Shadwell and Blackwall, and the designs for them have been already completed by Sir Joseph Bazalgette. With regard to street improvements, the widening of Parliament Street is a work which the Metropolitan Board express their readiness to undertake on the lines laid down by Mr. Shaw Lefevre. The question of the improvement of the means of access to the New Law Courts stands over for further consideration. Of the eight or nine millions sterling estimated to be required for these great undertakings, the Metropolitan Board will ask for powers to raise about one-half by the indirect taxation afforded by an extension of the period of the coal and wine dues.



## NOTES AND COMMENTS.

THERE is some satisfaction in discovering that a judge of the High Court of Justice is capable of drawing erroneous conclusions when he goes outside his court, and is no more exempt from the fallacies which arise from "mal-observation" than the dumbest witness. Mr. Justice MATHEW lately opened the new Shirehall at Shrewsbury, which has been restored from the plans of Mr. LOCKWOOD, of Chester. His Lordship congratulated the county upon possessing a building so admirably adapted for the purpose for which it was intended, and which was a credit to the architect who designed it, and to the public spirit of the inhabitants. "There is only one respect," continued the learned judge, "in which what is new appears to me to be inferior to the old. The old courts in their internal arrangements were excessively inconvenient, but externally they were picturesque; and, speaking for myself, I fear I cannot apply that commendation to the new structure." It would seem that Mr. Justice MATHEW was giving expression to his own recollections of some picturesque thing he had seen, and which no longer existed. But, strange to say, the exterior which His Lordship condemned has stood in Shrewsbury since 1835, and it remains unaltered from the time when it was designed by Sir ROBERT SMIRKE. So remarkable an utterance may well be cited henceforth as an example of a fallacy of vision.

WHATEVER may be the condition of art in this country, it is a remarkable fact that every year there are more books and publications relating to art issued in the English language than in any other. Out of the 886 publications and books on art which appeared in Europe during last year, 311 were in English, 269 in German, and 237 in French. The remaining 49 publications represent the efforts of the Italians, Swedes, Danes, and Spaniards.

DOUAI appears to possess an excellent type of a technical school. There are, according to Mr. BOWLER, four classes. The first deals with carpentry. A plain piece of wood is put into the hands of the pupil, who is taught to chamfer it, to pierce it, to cut a second piece to fit into the first, to make mortice and tenon, scarings, door styles, and generally joinery, not artistic carving. In the second stone-cutting is taught, the first exercise being to incise lines, curves, volutes, letters, and so on, up to a mantelpiece. The third class is for iron work, and there is a complete forge with a steam-engine. The fourth class is chemical. The expenses of the school are divided between the City and the State.

THE English acting-consul has given a description of the kind of hut which has been adopted for housing the labourers who are employed on the Panama Canal. They consist simply of four wooden pillars, on which are laid cross-beams, forming a parallelogram. The skeleton of the roof is then built, and on it, in lieu of tiles or shathing, is a good roof of palm-leaves or other branches, which are just as serviceable as clay tiles or slates for keeping out damp, rain, and heat. The lower portion of the house is not inhabited, nor is there any floor laid on the ground; but this latter part of the structure is built on the summit of the four pillars, and the inmates climb up to their first floor by means of a ladder. The object of this rustic style of architecture is to prevent fevers and colds. This is a hygienic measure; the air circulates freely underneath the first floor, which does not come in contact with the earth when it rains. The temperature of roofs made with branches and leaves is invariably cool, owing to the non-conducting nature of the material used. This simple style of habitation has proved successful and keeps the labourers in good health.

A DECISION which was given by Mr. WATKIN WILLIAMS in a case tried this week in the Queen's Bench Division, somewhat modifies the accepted theory in regard to architects' certificates. A builder was employed to enlarge a house at Twickenham, and it was agreed that he was to be paid 75 per cent. of the work done on the production of the architect's certificates, and the balance when the final certificate was given. The owner was dissatisfied with some part of the work, and he informed the builder that he should not accept the final certificate unless something he required had been

done. The architect stated at the trial that it would not have been in his province to have withheld a certificate if the defendant had required him to do so. The judge directed the jury that, if they thought that the certificate had been withheld by the architect acting on his own judgment, the defendant would be entitled to their verdict; if, however, they thought that the withholding of the certificate was due to the improper interposition of the defendant, and that he prevented the architect from giving his certificate, they should find for the plaintiff. The jury returned a verdict for the plaintiff for the amount claimed.

AN English Commission has been formed in connection with the International Exhibition of the Graphic Arts in Vienna. Sir FREDERICK LEIGHTON is president; Mr. COUSINS, R.A., is vice-president of the section of engraving, and Mr. SAMUEL HADEN of the section of etching. All exhibits must be sent on or before August 15 to Mr. SMITH, printseller, 22 Mortimer Street, W., who will forward them free to Vienna.

THE Royal and Civil Engineers who represent England in India are, as a rule, noted for their indifference to architecture. The Earl of KIMBERLEY, in distributing the prizes at the Cooper's Hill College, suggested that more attention should be given by students to art. His Lordship said he should, indeed, be glad to hear that some of our civil engineers had become proficient in architecture, for though he did not make pretensions to judgment in such matters, he thought, in common with many others, that we suffered a good deal from the extreme ugliness of the erections by which we were surrounded, and by the want of architectural effect in the enormous towns continually being built. But if His Lordship turned his attention to India he would discover among the Government works structures which are far more ugly than the buildings in English towns.

IT was announced at a meeting of an antiquarian society in Dublin on Monday that the Government had purchased the Ashburnham Manuscripts. It was suggested that all the volumes of the collection, both in the Irish language and connected with the history and literature of Ireland, should be secured for an institution in Dublin, where they will be accessible to the public under proper regulations, the most suitable place being the Royal Irish Academy.

THE Metropolitan Board of Works seem to have approved of the project of the First Commissioner of Works for the improvement of Great George Street, Westminster. It is proposed to remove the whole of the houses between King Street and Delahay Street, and northward to Charles Street. There would then be four lines of frontage on which buildings of a high class might be erected. It is estimated that the property would cost 755,000*l.*, while the new frontage would be worth 755,000*l.* The Government already possess part of the property, worth 320,000*l.*, which will be exchanged for so much of the new frontages as may be worth that sum, on condition that the Government may have power to determine the character of the buildings that may hereafter face Parliament Street. In no district of London has there been more improvement during the last twenty years than in that part of Westminster, and the new project will leave little to be done.

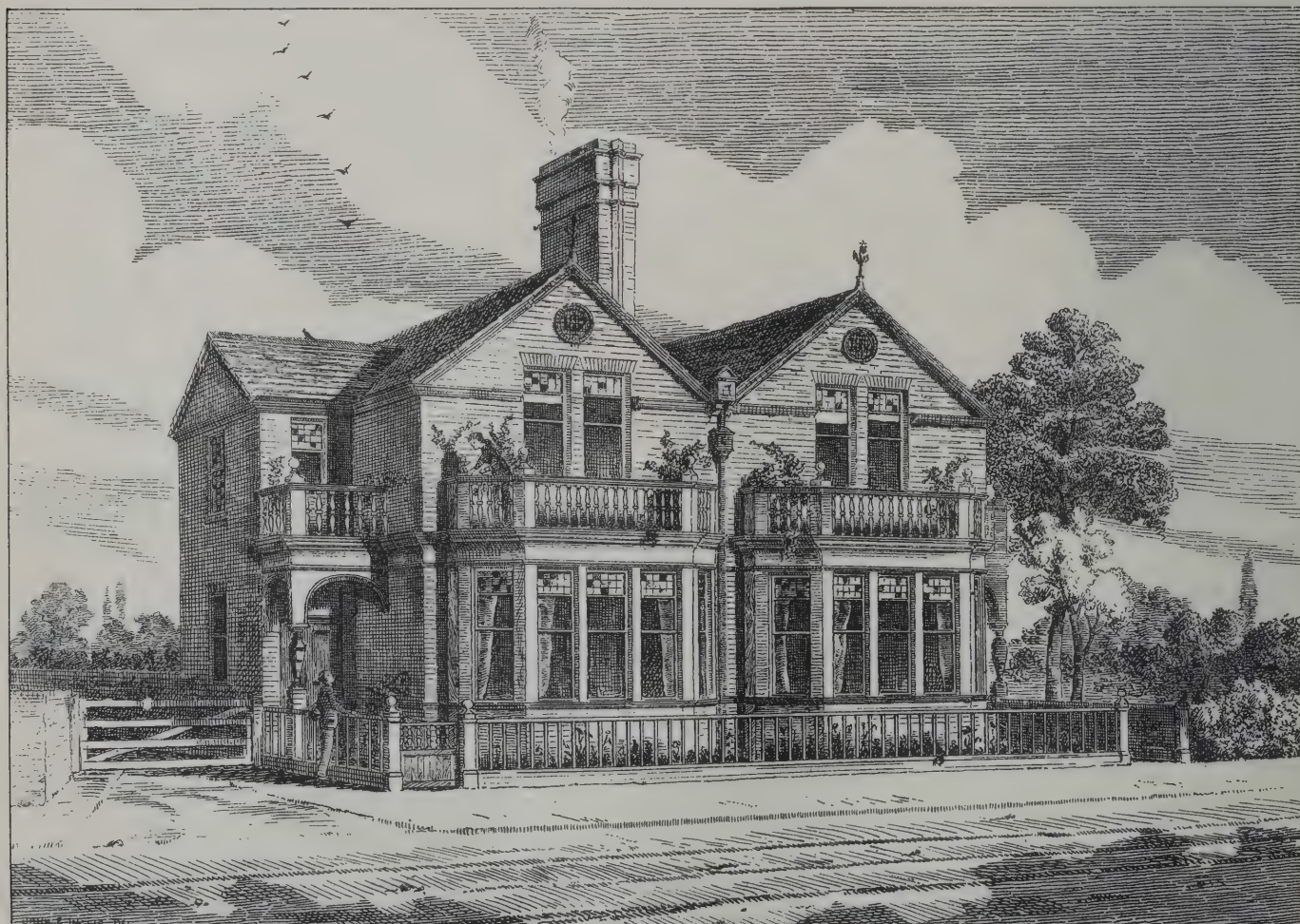
THE meeting of the National Association of Master Builders was held in Edinburgh on Monday. Mr. BIRD, the president, in his address referred to the question of quantities and forms of tender, which had been fully discussed by the sub-committee at a meeting held some time ago at Birmingham. It was hoped, he said, they would have the matter satisfactorily discussed and dealt with along with the Royal Institute of British Architects next year, which was the fiftieth anniversary of that institution. According to Mr. BIRD, the question of quantities and of contracts is one of vital importance to builders in England, who suffer more than builders in Scotland, where, fortunately, they generally have ordained surveyors. Frequently the quantities taken out by architects in England were, he said, incompetently taken out and were insufficient, and the builders consequently suffered. The Association has now one hundred and seventeen local associations, twenty being in Scotland. The next meeting is to be held at Bradford.







SAXONBURY: LODGE DITTON:  
near SURBITON S.M.  
J. NIXON HORSFIELD ARCHT.



COTTAGES, NORBITON PARK, SURREY THOS. LOCKWOOD HEWARD ARCHT

Sprague & Co. 22, Mark Lane, Cannon St. EC



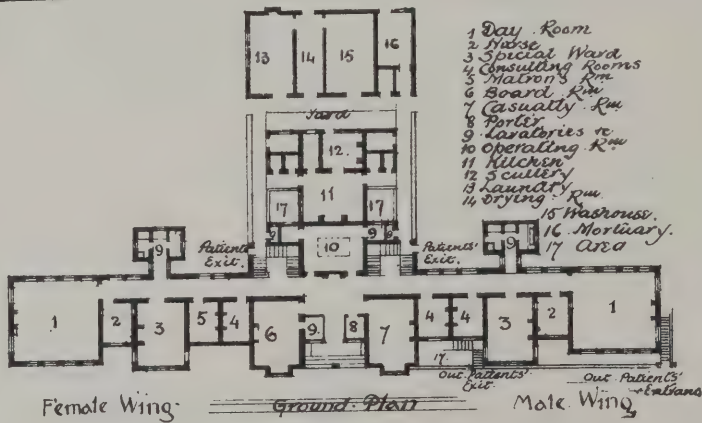






# PRIVATE ASYLUM AT

W. HAWLEY LLOYD, ARCHITECT.



## Stratford upon

Design by Alfred W. C.

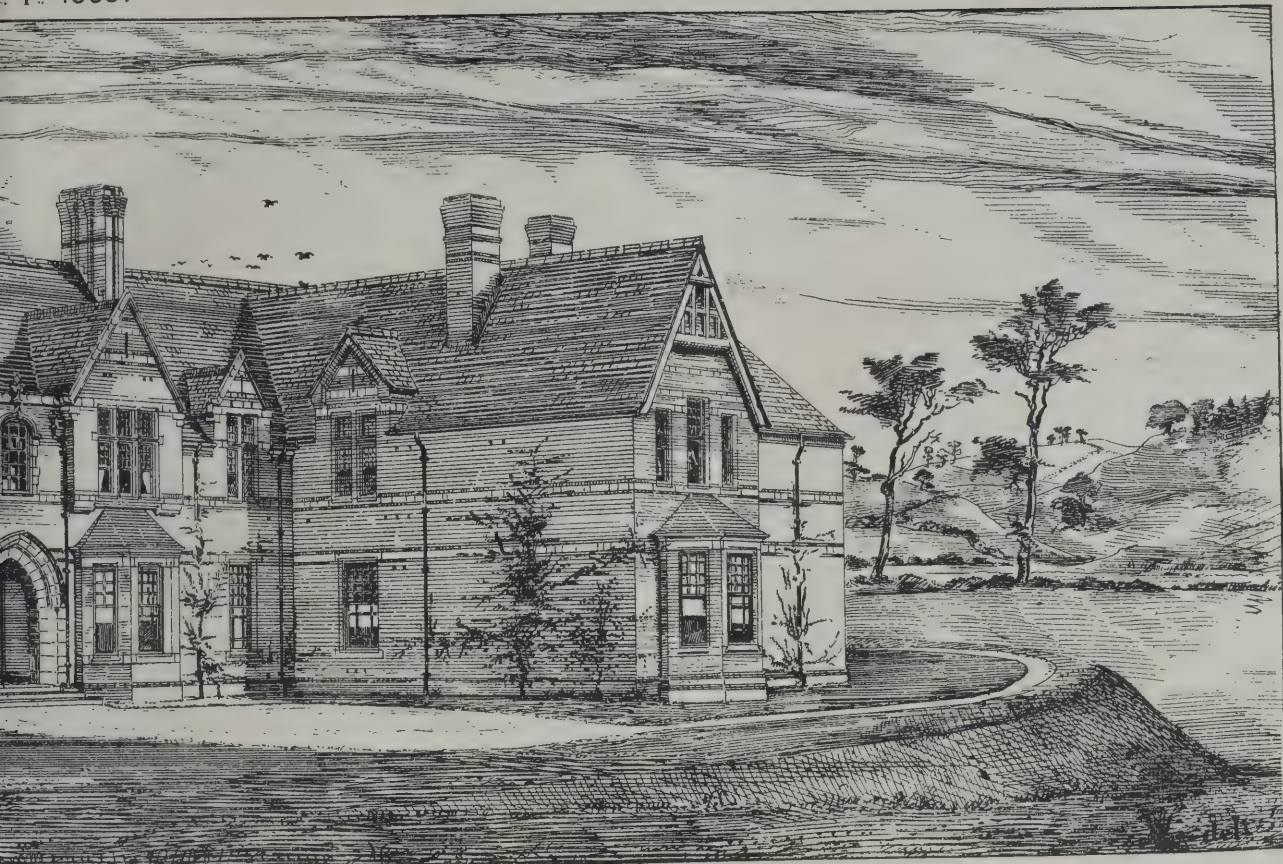
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Scale

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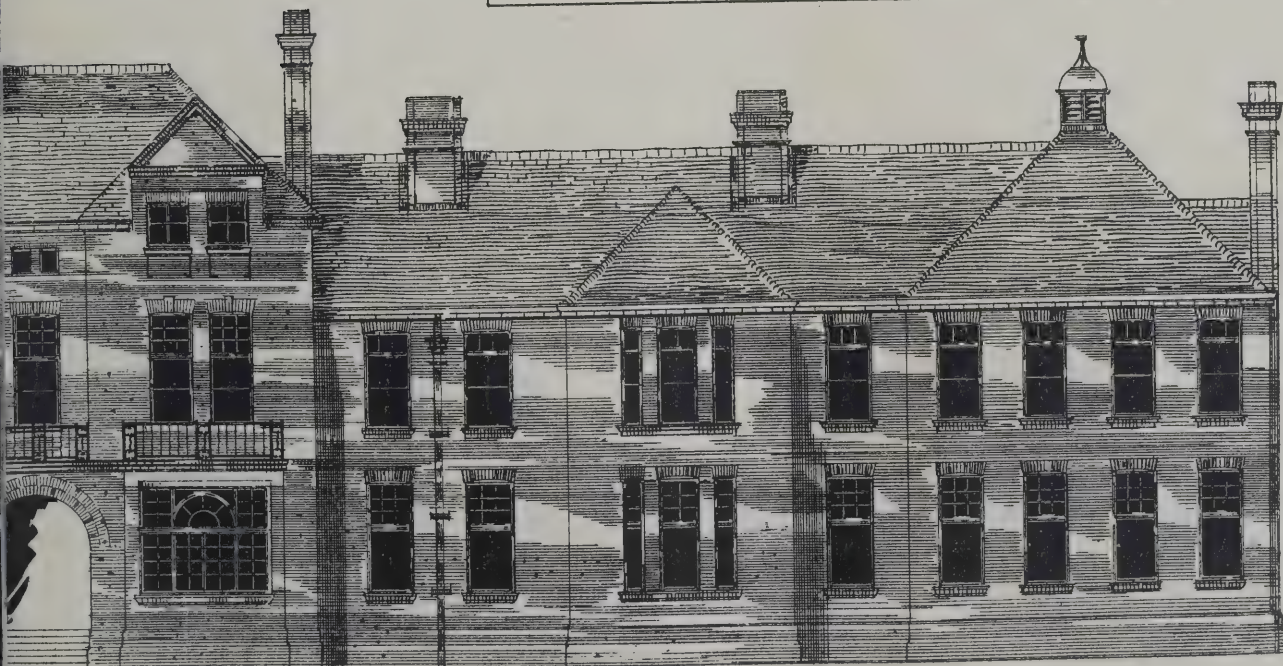
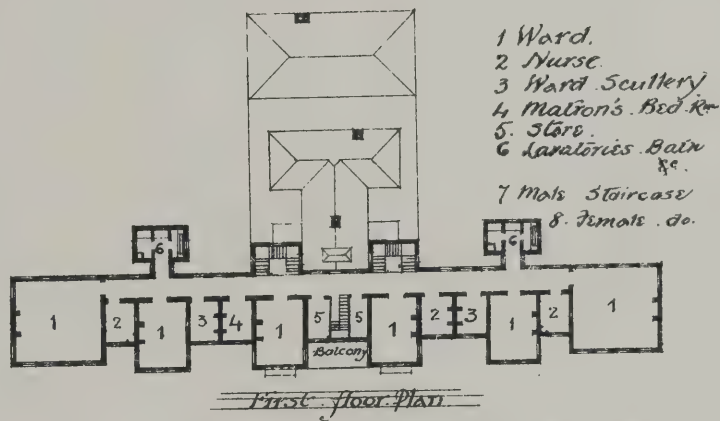


ENLEY IN ARDON.  
MORE ROW, BIRMINGHAM.

# Olvon Hospital:

of Arthur G. Cross.

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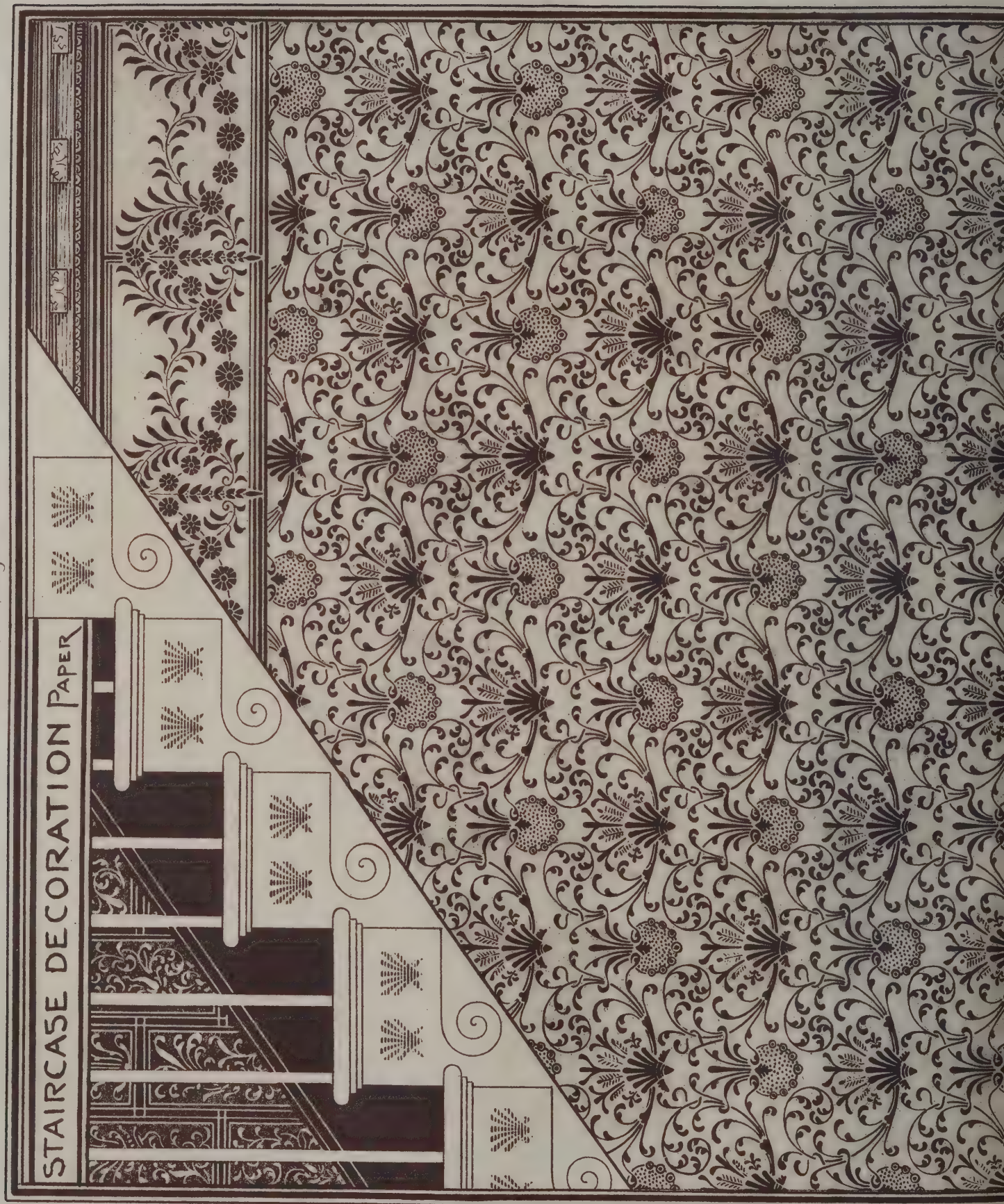




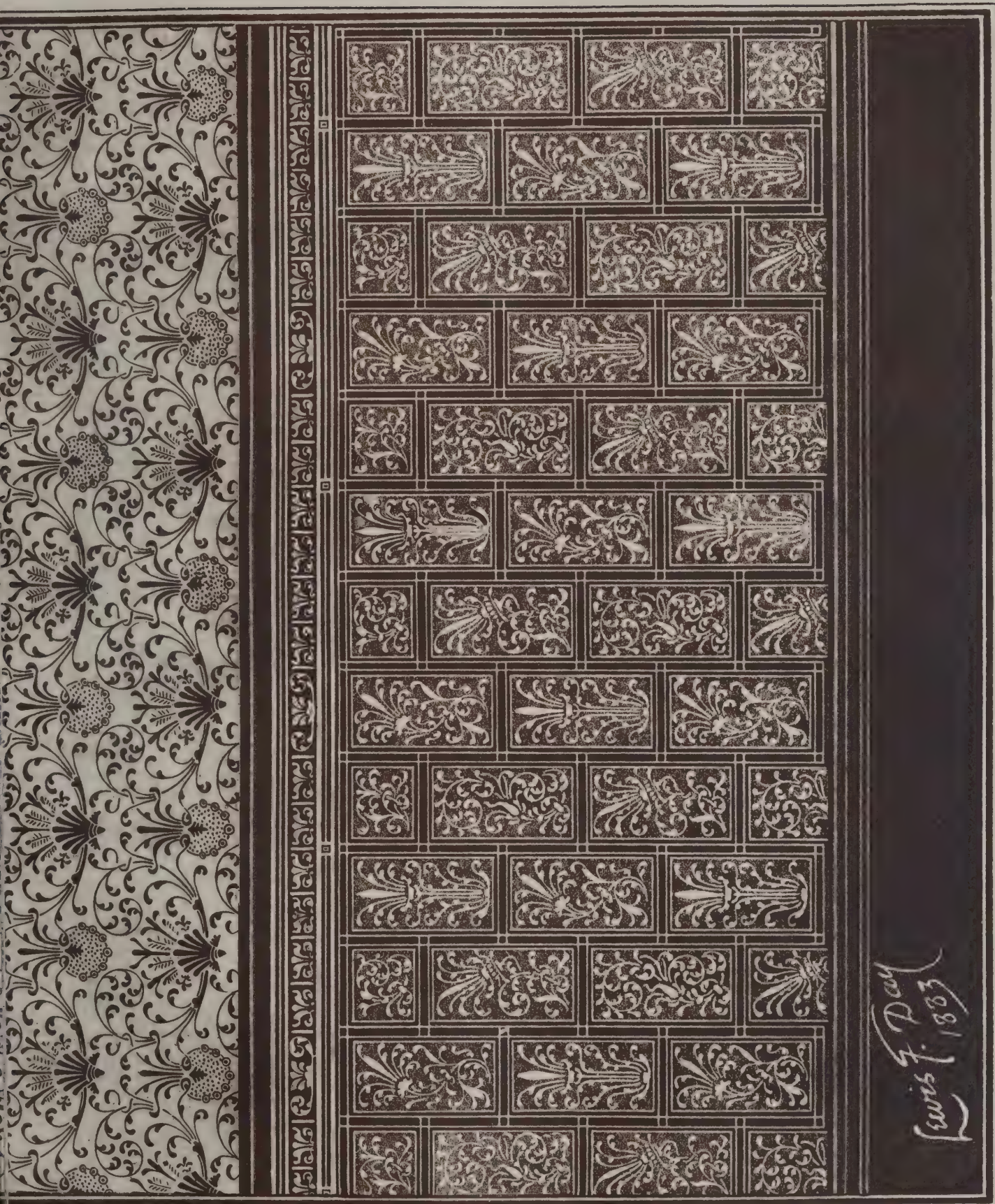












Lewis F. Day  
1883









MISSION CHURCH AND DAY SCHOOLS, CLAUGHTON.  
ALEX<sup>R</sup> BLEAKLEY, ARCHITECT.



HOUSE AT WESTOE, SOUTH SHIELDS.  
H. GRIEVES, ARCHITECT.







## ILLUSTRATIONS.

## STAIRCASE DECORATION.

OUR illustration shows the decoration of a staircase with papers in a style appropriately simple and severe. It is one of the latest designs of Mr. LEWIS F. DAY, and is produced by Messrs. W. B. SIMPSON & SONS, of St. Martin's Lane, who have just issued a new pattern-book of papers, all of which have been designed by the same artist, and are executed in his own colourings.

## PRIVATE ASYLUM, NEAR HENLEY-IN-ARDEN.

THIS asylum, which was recently completed for Dr. S. H. AGAR, M.D., is, we believe, the only one which has been erected for private use for many years.

In nearly every case previously private asylums have been established in old houses altered to a greater or less extent to suit the new use to which they have been converted, and it has been reserved for Dr. AGAR, of Henley-in-Arden, to initiate a better policy by erecting a building carefully designed for its special purposes.

In preparing the plans the leading idea throughout has been that of a country-house of a suitable plan, specially arranged, and giving three distinct and separated apartments—viz., a suite of private apartments, one of ladies' and ladies' attendants' apartments, and one of gentlemen's and gentlemen's attendants' apartments—but all in one block, so that the administration and service might be as little laborious as possible. Anything in the nature of an institution has been avoided, but, at the same time, everything tending to the comfort, health, and safety of the patients has been as carefully kept in view.

The fronts of the house, which are shown in our illustration, are to the south and west. Rooms are provided for forty patients and their attendants, besides the private suite, which consists of a dining-room, drawing-room, study, bedrooms, and dressing-room.

A block, consisting of the stables, coach-house, and other outbuildings (not seen in the view), is to the north-east of the house, which stands in about thirteen acres of garden and other ground. The walls are all of local red and brown brick, with stone dressings; the roofs are covered with red Llanberis slates. The whole of the works have been carried out by Messrs. SMALLWOOD & Co., of Wootton, from the designs of Mr. W. HAWLEY LLOYD, architect, 79 Colmore Row, Birmingham.

## DESIGN FOR STRATFORD-UPON-AVON HOSPITAL.

IN this design accommodation is provided (on either side of the administrative department) for fifteen male and fifteen female patients, and a commodious waiting-hall and dispensary, drug-room, &c., are planned for the separate use of the out-patients. Owing to the smallness of the amount proposed to be expended on the building, it was necessary to keep the exterior as plain and unpretending as possible. Red facing bricks were proposed for the fronts, and Broseley tiles for the roofs. The building was estimated to cost (including entrance gates and palisading) the sum of 4,600*l*. Messrs. A. W. & A. G. CROSS, of 56 Chancery Lane, and Hastings, are the architects, by whom the drawings were prepared.

## SOUTH COTTAGES, NORBITON PARK ESTATE, SURREY.

THESE cottages have been erected on the estate at a cost of about 380*l*. a pair. They contain six rooms, scullery, water-closet, and coal cellar, separate entrances. The architect was Mr. T. LOCKWOOD HEWARD, 7 John Street, Bedford Row, W.C., and New Malden, Surrey. The whole of the work was carried out by Mr. HENRY THORN, builder, New Malden, Surrey.

## HOUSE AT LONG DITTON.

THIS house was lately completed from the designs of Mr. J. NIXON HORSFIELD, architect, of Surbiton.

## SCHOOLS AND MISSION CHAPEL, CLAUGHTON, BIRKENHEAD.

THE foundation-stone of the school and chapel at Cloughton, forming the subject of one of our illustrations, was laid in January last by Mr. W. LAIRD. In December 1881 the committee of the schools invited five architects to send in designs, and that by Mr. ALEXANDER BLEAKLEY, jun.,

A.R.I.B.A., was selected. The plan is somewhat of the form of the letter E, the infant school forming the central block, separating the boys' and girls' divisions. There are three principal rooms and nine class-rooms. One of the latter will be fitted up for a cookery class. The building is faced with Ruabon red bricks, the dressings being moulded red terracotta, and the roofs covered with brindled roofing tiles. The inside faces are of local machine-made bricks. The windows are glazed with rolled cathedral glass in lead lights, and fitted with hopper ventilators. The contractors for the buildings are Messrs. A. BLEAKLEY & SON, Birkenhead.

## ADDITIONS TO VILLA RESIDENCE, WESTOE, SOUTH SHIELDS.

THE villa partly shown in the illustration belongs to Mr. T. B. BARKER, and is situated on the south side at the entrance of Westoe village. The new wing has been built on the foundations of the old stable buildings, and contains a drawing-room, bedroom, and billiard-room, with lavatory, &c. The facings are of red bricks, with Carlisle stone dressings, and the roofs are covered with Broseley red tiles. The contractor was Mr. WM. N. HUDSON, and the architect, Mr. HENRY GRIEVES, of South Shields.

## PROPOSED ALTERATION IN THE HOUSE OF LORDS.

THE report has been published of the Select Committee of the House of Lords appointed "to consider the construction and accommodation of the House, including the galleries and rooms belonging thereto, more especially in reference to seating, hearing, and reporting; and whether any and what improvement therein can be made." The recommendations are as follows:—

1. The committee have met and examined several witnesses, and have considered the several matters referred to them.

2. With regard to the accommodation of the reporters, the committee are of opinion that the room now occupied by the reporters for transcribing is insufficient, and they recommend that a larger room should, if possible, be assigned to them by the proper authority.

3. The committee would have been glad to have recommended the extension of the reporters' gallery up to the side galleries, but it appears that there would be a serious difficulty in doing this, owing to the difference in the levels of the reporters' gallery and the side galleries. They recommend, however, that the ornamental uprights or pinnacles that rise above the desk on which the reporters write, and which interfere with the view and hearing, should be removed, and that the partitions and backs, or doors, to the front row of seats should be done away with, thus enlarging the space and getting rid of the noise occasioned by opening and shutting of the seats. Sitting room in the front row may thus be provided for twelve instead of ten.

4. The committee consider that the reporting would be facilitated if the officers of the House were directed to enforce order and silence more strictly at and beyond the bar.

5. The seats in the side galleries are extremely narrow and uncomfortable, and on nights when there is a large attendance the amount of accommodation is much short of what is needed. The committee think that an extension of the side galleries, giving 226 comfortable seats in place of 146 seats, many of which are cramped and uncomfortable, would be desirable, provided it can be done without injury to the architectural beauty of the House, and the wider galleries would probably improve the acoustic qualities of the House. In order to judge of the effect which a widening of the galleries would have on the appearance of the House, the committee recommend that the experiment should be tried by projecting (but not for occupation) the whole or a sufficient part of one of the galleries, taking care that the new work shall be made and coloured or toned so as exactly to correspond in colour, material, and shade with the present work.

6. The space between the peers' seats on the floor of the House is inconveniently narrow from back to front. The committee recommend that the table of the House should be reduced to the size of 6 feet 11 inches square, by which 6 inches will be added to the gangway on each side between the table and the front bench, and that the front bench be moved forward 6 inches on each side, and that the seats on each side be rearranged, using the space thus gained to widen the distance between the three front benches.

The committee further recommend that the lavatory accommodation be improved in the manner suggested by Mr. Scott, and that the changes suggested by him for hanging coats in the Peers' House lobby should be made.

8. The committee recommend, in the event of your lordships approving of the changes suggested, that the Deputy Lord Great Chamberlain should communicate with the First Commissioner of Works as to their execution.



9. The committee think that additional accommodation should be given to the department of the Lord Chancellor, and they understand that this accommodation could be obtained by agreement between the Lord Great Chamberlain and other officers of the House.

### MR. RUSKIN ON ART IN TOWNS.

A PREFACE has been written by Mr. Ruskin to a pamphlet containing two papers read by Mr. T. J. Horsfall, of Manchester, on "The Study of Beauty," and "Art in Large Towns." Mr. Ruskin says:—

"I have been asked by Mr. Horsfall to write a few words of introduction to the following papers. The trust is a frank one, for our friendship has been long and intimate enough to assure their author that my feelings, and even practical convictions in many respects differ from his, and in some, relating especially to the subjects here treated of, are even opposed to his; so that my private letters (which, to speak truth, he never attends to a word of) are little more than a series of exhortations to him to sing—once for all—the beautiful Cavalier ditty of 'Farewell, Manchester,' and pour the dew of his artistic benevolence on less recusant ground. Nevertheless, as assuredly he knows much more of his own town than I do, and as his mind is evidently made up to do the best he can for it, the only thing left for me to do is to help him all I can in the hard task he has set himself; or, if I can't help, at least to bear witness to the goodness of the seed he has set himself to sow among thorns. For indeed the principles on which he is working are altogether true and sound; and the definitions and defence of them in this pamphlet are among the most important pieces of art teaching which I have ever met with in recent English literature—in past art literature there cannot of course be anything parallel to them, since the difficulties to be met and mischiefs to be dealt with are wholly of to-day. And in all the practical suggestions and recommendations given in the following pages I not only concur, but am myself much aided as I read them, in the giving form to my own plans for the museum at Sheffield; nor do I doubt that they will at once commend themselves to every intelligent and candid reader. But, to my own mind, the statements of principle on which these recommendations are based are far the more valuable part of the writings, for these are true and serviceable for all time, and in all places; while in simplicity and lucidity they are far beyond any usually to be found in essays on art, and the political significance of the laws thus defined is really, I believe, here for the first time rightly grasped and illustrated. Of these, however, the one whose root is deepest and range widest will be denied by many readers, and doubted by others, so that it may be well to say a word or two further in its interpretation and defence—the saying, namely, at page 22, that 'faith cannot dwell in hideous towns,' and that 'familiarity with beauty is a most powerful aid to belief.' This is a curious saying, in front of the fact that the primary force of infidelity in the Renaissance times was its pursuit of carnal beauty, and that nowadays (at least so far as my own experience reaches) more faith may be found in the back streets of most cities than in the fine ones. Nevertheless, the saying is wholly true; first, because carnal beauty is not true beauty; secondly, because rightly judged, the fine streets of most modern towns are more hideous than the back ones; lastly, and this is a point on which I must enlarge, because universally the first condition to the believing there is order in heaven is the sight of order upon earth; order, that is to say, not the result of physical law, but of some spiritual power prevailing over it, as—to take instances from my own old and favourite subject—the ordering of the clouds in a beautiful sunset, which correspond to a painter's invention of them; or the ordering of the colours on a bird's wing, or of the radiations of a crystal of hoarfrost or of sapphire, concerning any of which matters, men, so called of science, are necessarily and for ever silent, because the distribution of colours in spectra and the relation of planes in crystals are final and causeless facts, orders, that is to say, not laws. And more than this, the infidel temper which is incapable of perceiving this spiritual beauty, has an instant and constant tendency to delight in the reverse of it, so that practically its investigation is always, by preference, of forms of death or disease; and every state of disorder and dissolution—the affectionate analysis of vice in modern novels being a part of the same science. And to keep to my own special field of study—the order of clouds—there is a grotesquely notable example of the connection between infidelity and the sense of ugliness in a paper in the last *Contemporary Review*, in which an able writer, who signs Vernon Lee, but whose personal view or purpose remains to the close of the essay inscrutable, has rendered with considerable acuteness and animation the course of a dialogue between one of the common modern men about town who are the parasites of their own cigars, and two more or less weak and foolish friends of hesitatingly adverse instincts; the three of them, however, practically assuming their own wisdom to be the highest yet attained by the human race; and their only diversion on the mountainous heights of it being by the aspect of a so-called 'preposterous' sunset, described in the

following terms: 'A brilliant light, which seemed to sink out of the landscape all its reds and yellows, and with them all life; bleaching the yellow cornfields and brown heath; but brandishing into demoniac energy of colour the pastures and oak woods, brilliant against the dark sky as if filled with green fire. Along the roadside the poppies, which an ordinary sunset makes flame, were quite extinguished, like burnt-out embers; the yellow hearts of the daisies were quite lost, merged into their shining white petals, and, striking against the windows of the old black-and-white chequered farm (a ghastly skeleton in this light), it made them not flare—nay, not redden in the faintest degree—but reflect a brilliant speck of white light. Everything was unsubstantial, yet not as in a mist; nay, rather substantial, but flat, as if cut out of paper and pasted on, the black branches and green leaves, the livid, glaring houses, with roofs of dead, scarce perceptible red (as when an iron turning white-hot from red-hot in the stithy grows also dull and dim). "It looks like the eve of the coming of Antichrist, as described in Mediæval hymns," remarked Vere, "the sun, before setting never more to rise, sucking all life out of the earth, leaving it but a mound of livid cinders, barren and crumbling, through which the buried nations will easily break their way when they arise." As I have above said, I do not discern the purpose of the writer of this paper; but it would be impossible to illustrate more clearly this chronic insanity of infidel thought which makes all Nature spectral; while, with exactly correspondent and reflective power, whatever is dreadful or disordered in external things reproduces itself in disease of the human mind affected by them.

### BIRMINGHAM ARCHITECTURAL ASSOCIATION.

THE members of this Association on Friday in last week visited North Wales, and were enabled, by the courtesy of Mr. J. C. Edwards, the proprietor of the Pen-y-bout Terra-cotta Works, to view the manufacture of bricks, encaustic tiles, and terra-cotta. Amongst those present were Messrs. W. H. Kendrick, B. Corser, W. Doubleday, E. Wood, E. Eayres, H. H. McConnal, F. E. F. Bailey, C. E. Bateman, V. Scruton, T. W. F. Newton, and Franklin Cross (hon. sec.). On arrival at Chirk, at 10.49 a.m., the party were met by carriages, and driven straight to the works, where they were conducted round by the proprietor, who explained the whole process of manufacture, from the time when the clay rests in its natural bed to the time when it leaves Ruabon as terra-cotta, by rail or water, for all parts of the United Kingdom. Almost every conceivable feature of architectural adornment was seen in course of manufacture, and great admiration was expressed at the beautiful colour, texture, and excellent workmanship of the blocks. In the modelling-room was seen a large model of *Flora*, the architectural destination of which, when finished, is the Smithfield Vegetable Market, now in course of erection for the Corporation of Birmingham. The manufacture of encaustic tiles was also explained. The party again took to carriages, and were driven to the home of Mr. Edwards, near Llangollen, where they were entertained at luncheon by that gentleman. After lunch, Mr. W. H. Kendrick gave the toast of "Our Host," which was supported by Mr. Franklin Cross, and acknowledged by Mr. Edwards. A mountain ascent in the afternoon afforded a view of the lovely vale of Llangollen, and the rest of the day was spent in Mr. Edwards' grounds and garden. Bidding adieu to this beautiful spot, and, after a drive of six miles, crossing by the way the vale of Llangollen, the party arrived at Chirk Station, whence they returned by train to Birmingham.

### NATIONAL COMPETITION DRAWINGS.

THE reports have been published of the examiners upon the National Competition Drawings in June 1882—viz., Messrs. Poynter, R.A., Marks, R.A., Leslie, R.A., Yeames, R.A., W. Morris, Stevenson, Armstrong, Bowler, and Professor Unwin.

1. *Drawing from the Antique and from Life, and Modelling the Figure.*—The gold medal for the antique was obtained by a drawing from Manchester of great merit, shown in the application of careful work without excessive labour, in which a thoroughly complete result was obtained. The award was not made with a view to the encouragement of the particular method of execution employed, but on account of the really excellent qualities of drawing and finish; it being understood that high finish on a foundation of good drawing, and without waste of time spent on misapplied labour, is an essential of the best style. A bronze medal was awarded to a drawing of the *Clapping Faun*, which, though in a broader style and less complete in execution, was generally correct in proportion and outline.

It is considered that it would be an advantage if the students who make drawings of the full-length figure should in some way indicate the level of the eye; the doing so would in many cases assist them in avoiding errors of perspective in the treatment of their subjects, and put the examiners in a better position to judge their work. The black-and-white studies of heads from the life were this year generally below the average of former years. Much



of the modelling work was very good, notably the full-length figures from the life, and several heads; but some of the heads modelled from the antique were altogether wanting in correctness of form—absolutely necessary for success in modelling. Many models were sent up of considerable weight, which were far below the hope of a reward in the competition, and others so badly packed as to be too much injured for judgment. These errors should be avoided. Where the work sent up is of a very low standard the expenses may in future be disallowed.

2. *Painting in Monochrome and from the Life.*—The gold medal was gained by a study of the *Apollo Belvedere* from the Edinburgh Male School of Art, painted with directness and simplicity, and of much clearness of tone. A study from life, in water-colour, of a girl seated in an armchair gained a bronze medal for careful drawing and attention to truth, both of character and tone. If the objects selected and the details throughout had not been so essentially ugly, and so badly arranged, this painting would no doubt have gained a higher award.

3. *Architecture, Designs for Wall Decoration, and Modelling of Ornament.*—The highest award made for architectural design was given to a student of the Leicester School, who sent a set of several practical drawings of a cottage hospital, showing skill in design ably directed to its object. Elaborate drawings, overcrowded with details, obtained lower distinctions, though prepared for more pretentious buildings. Some figure designs for decoration failed in proper expression of their intention for want of any indication of the mouldings which would surround them in their place in any scheme of decoration. It is suggested that, in future, no awards should be made for figure compositions unless in combination with a general decorative scheme. It is to be regretted that in certain schools the instruction should, apparently, be devoted exclusively to Gothic architecture. The orders of Classic architecture being founded on strict and carefully-studied principles of proportion, and with details studiously appropriated to their various features, are of the highest value as a basis for the study of design, and should on no account be neglected. Some wall papers, which were fairly well designed as regards lines and spaces, failed for want of better colour.

4. *Designs for Carpets and Surface Decoration.*—Sufficient attention has not been given to the requisite difference of treatment of patterns for hangings and for flat surfaces. In many instances, notably from one school, patterns for fabrics were designed in the same colours and with precisely the same treatment as for wall papers, no allowance being made either for the difference of material and the nature of the colours used or for the different conditions under which the patterns must ultimately be displayed. Among the successful works from Macclesfield a bronze medal was given to a silk hanging for good design and happy seizure of the characteristics of style, although the colour was less satisfactory. Several rewards were given for designs to be executed in colour, in which the arrangement of lines and distribution of form were good, although changes in colour, such as could be made in execution, would be required to make them thoroughly successful. Five designs for tapestry hangings from West London obtained a silver medal, being well designed and coloured, but wanting in clearness of definition, and without explanation of scale.

5. *Still-life Painting.*—A silver medal was given to a work somewhat above the usual size from Ilkley, in which the treatment of diffused daylight was remarkably successful, so that in a wide space objects kept their places well, the student having encountered the difficulty of representing the relative positions of objects retiring from one another at considerable distances. It appears to the examiners that in some cases sprays of flowers so large have been chosen, as to be impossible of execution while fresh even by accomplished painters. The student is thus tempted to finish his group after the flowers become drooping or faded. In the studies for "tone" suggested in the last report, the intention of the examiners has been somewhat misunderstood, the objects chosen having been placed generally in the same plane with one another, and with insufficient space between them and the background. The objects should be represented at various distances behind each other, retiring into the picture; the merit of the work consisting in the accuracy of the rendering of the relative tones between the near and distant objects, and their relief from each other and from the background.

6. *Mechanical Drawings and Drawings from Measurement.*—No set of drawings was submitted of the type of good working drawings of fairly complicated machinery, although drawing of this kind is likely to be more generally useful and involves more knowledge than highly-finished shaded drawings of simple portions of machines. The highest distinction in machine-drawing, given for careful shading, was a bronze medal for works not reaching the standard attained in former years.

The following observations of the examiners of the local advanced examinations are added for the information of teachers:—

*Architecture.*—If students who are inadequately prepared could be prevented, or at least discouraged, from offering themselves for examination, the result would be beneficial, as students would be led to feel that an examination was a thing to work for, not to take on the bare chance of their possibly scraping through, as must have been done by some of those whose work has been looked

over. A great deal of bad drawing was found, and this even in cases where the replies in writing showed a fair, or even a good, knowledge of the subject. Even where the drawing was fairly good, it conveyed the impression of having been almost in every case learnt from the flat only, and often without a thorough grasp of the subject. If architectural students would produce freehand, pencil, or chalk outline from plaster casts of architectural foliage, and other ornaments, and of mouldings, so that the features of styles might be familiar to them, the examiner is of opinion that very great benefit would result. The drawing of the orders, which generally speaking was well, and in not a few cases admirably, done, may be excepted from the above remarks.

*Perspective.*—There seems to be a tendency amongst the candidates to cover the paper with the working lines; this only serves to confuse the drawing and can be of no use to the student when working out the problem. The candidates often attempted to work out on the ground line in the picture plane problems which could be more easily arrived at, and with greater accuracy, on the plane of the feature required or close to it. In the projection of shadows the examiner notes that very few, if any, of the candidates commence by ascertaining the line of demarcation of light and shade on the object itself which throws the shadow, and some of them go so far as to obtain the shadows thrown by lines which are themselves entirely in the shade.

## THE SCIENCE AND ART DEPARTMENT.

THE annual report of the Science and Art Department has been issued. It states that the numbers of persons who have during the year 1882 attended the schools and classes of science and art in connection with the Department are as follows, viz.: 68,581 attending science schools and classes in 1882 as against 61,177 in 1881, and 909,216 receiving instruction in art, showing a decrease upon the previous year of 481. The decrease is owing to a change of date for the examination in drawing of elementary schools.

The attendance at the art and educational libraries at South Kensington and at the National Library of Ireland in 1882 has been 85,837, or an increase of 888 over that of last year. The museums and collections under the superintendence of the Department in London, Dublin, and Edinburgh were last year visited by 2,476,049 persons, showing an increase of 11,511 on the number in 1881. The number of visitors to the South Kensington Museum shows a decrease of 55,298, the numbers being 1,017,024 for 1881, and 961,726 for 1882. The returns received of the number of visitors at the local art and industrial exhibitions, to which objects were contributed from the South Kensington Museum, show an attendance of 1,553,083. The total number of persons who during the year 1882 attended the different institutions and exhibitions in connection with the department has been upwards of 5,015,217. This total, compared with that of the previous year, presents an increase of 203,959 persons.

The expenditure of the department during the financial year 1882–3, exclusive of the vote for the geological survey, which was 18,536*l.* 17*s.* 4*d.*, amounted to 326,826*l.* 17*s.* 3*d.*

New schools of art have been established during 1882 at Canterbury, Chelsea, Dundee, Hornsey, Huddersfield, Peterborough, Scarborough, Stoke Newington, Tiverton, and Weston-super-Mare, and a branch class at Darlington. The total number of schools of art in operation throughout the kingdom was 169, and 13 branch classes. The total number of students in these schools and their branch classes was 33,729, as against 160 schools, 11 branch classes, and 31,592 students in 1881.

At the annual examination in April 1882, 21,291 students submitted 211,748 drawings or models; the corresponding numbers in 1881 having been 19,940 students, and 197,048 works, so that the annual increase reported in previous years is still maintained. In this examination 18,745 students, on account of whose instruction payments were made to the committees of the schools, were of the industrial classes. The annual examinations in second grade drawing were attended by 11,716 students of schools of art, of whom 5,501 were successful, and 1,517 obtained prizes, showing increases of 980 and 337 respectively.

The report refers to the long-projected gallery of casts of ancient classical sculpture. A small but fairly complete series of casts has now been acquired under the advice of the committee, and a portion of the new buildings has been appropriated for their exhibition. This, it is hoped, will be opened in the course of 1883. Mr. Walter C. Perry, to whose knowledge and exertions the collection owes so much, has been invited to prepare a descriptive catalogue. A special committee on building materials strongly recommended the maintenance, revision, and development of the collection. As yet no active measures have been taken to carry out these recommendations, as the tenure of the space in which the collection is deposited has been uncertain, but the Department hopes shortly to be able to do so, and also to make better provision for its exhibition; and, meanwhile, the aid of a committee of gentlemen specially conversant with building and engineering to advise in these respects has been secured.



## THE WELLINGTON MONUMENT IN ST. PAUL'S.

LORD JOHN MANNERS, who was the First Commissioner of Works when the design of the late Alfred Stevens for the Wellington monument was selected, is opposed to the project for removing the monument to some other position in the cathedral. His lordship writes :—

The site was chosen after a careful inspection by the then dean (Milman), Mr. Penrose, and myself. Until this present controversy arose I never heard that Mr. Stevens was dissatisfied with the arrangement then come to, and, as my relations with him were of the most friendly character, I think it unlikely he would have withheld from me his dissatisfaction had he entertained any; and Mr. Penrose, whose communications with him were necessarily frequent and confidential, informs me that Mr. Stevens never expressed to him any regret at the change of site. I remember perfectly well that we were unanimous in selecting the Consistory Court.

In addition to the arguments urged by Mr. Fergusson against the suggested removal, I would point to the beautiful allegorical sculptures by Mr. Woodington and Mr. Calder Marshall on the apsidal east and west walls of the chapel, which, from their shade, could not be transferred to a flat surface. Of the inconvenience and impropriety of moving memorials to the illustrious dead, except under urgent necessity, I need say nothing; in this case no such necessity exists, and I am authorised to say that the Duke of Wellington feels strongly on this aspect of the question.

I concur with Mr. Fergusson that what is wanted is the removal, not of the monument, but of the wooden screen which partially hides and spoils the effect of that fine work of art, and which, handsome and appropriate when the space it enclosed was used as the Consistory Court, is altogether inappropriate and incongruous when blocking from the nave the view of the Wellington monument. Instead, therefore, of a deputation to the Prime Minister to urge the removal of the monument, I would suggest a memorial to the Dean and Chapter praying for the removal of the screen in front of it.

## THE HALL AND CHURCH OF HIGH ERCALL.

THE old hall and church of High Erccall, in Shropshire, were lately visited by the members of the Severn Valley Field Club. Papers on the buildings were read by Mr. R. Anslow.

The erection of the hall was, he said, began in 1608 by Sir Francis Newport, knight, on the foundations of or in addition to the ancient residence of the De Erccalls, of which the arches now standing in an isolated position in rear of the present building may be a portion. An inscription on one of the north gables is as follows :—

“Ao. Dni.  
1608, ætat. vero suæ 52,  
Franciscus Newport miles,  
Hoc ædificium, Deo incepta  
Secundante, inchoavit, peregit.”

While another inscription on a stone in the garden wall runs thus :—

“Pars ista hujus Dom. inchoata fuit  
14 Martii anno 1617. Finita vero 13 Octobris  
anno 1620. Opera impensis Francisci  
Newport militis.”

Reading these inscriptions together it appears that this mansion took twelve years to build. In our days a town springs into existence in less time. Francis Newport, knight, was, however, no “speculative builder,” as these massive erections bear witness. Where the materials were procured there is no evidence to show. Tradition says they were brought from the ruins of Uriconium, having done intermediate duty in the fabric of Haughmond Abbey; but there is nothing to lend even a colouring of proof to this assumption, beyond the fact that the site of the Roman station was, at the time of the erection of this house, the property of the Newports. It is rarely that we meet with Elizabethan houses constructed so solidly as this. It was built, however, as much for a fortress as for a residence, and it is not at all improbable that some of these massive blocks may have come from the walls of Uriconium and Haughmond. The stone is certainly not from any local quarry. The massive oak timbers of the open roof are interesting, and must have come out of trunks of immense girth and singular formation. In various parts of the garden and grounds traces of the foundations of the larger residence and fortification are still discernible, especially on the eastern side, where some important structure has evidently stood. It was near here that in levelling a mound Mr. Steedman's labourers came upon a quantity of coins, about 1,000 in number, and weighing no less than 12½ lbs. The greater part were of the reigns of Charles I., some of Elizabeth, and a few of Philip and Mary. Cannon-balls and musket-bullets have been also found here, some of which, and a portion of the coins, Mr. Steedman will exhibit. In the

restoration of this historical house some twenty years ago Mr. Steedman was thoroughly imbued with the spirit of the original builders. The work was well done, and bids fair to always remain in the category of “unexhausted improvements.” The moat which surrounded the hall ran along the present churchyard wall, and in the direction that has been pointed out.

There is no mention of a church at Erccall in the Domesday Survey. The mother-church of the parish, Mr. Eyton thinks, stood at Rodington. But within eight years the supremacy was given to Erccall, as in 1094 “the church of Archalou, with all things pertaining thereto,” was given by Earl Roger to Shrewsbury Abbey. That the first church here was not of Saxon origin is proven by the fact that it was dedicated to St. Edward the Confessor. Probably it was erected by the Norman earl. The present edifice, Mr. Street supposed, was erected on the foundations of the original church in or about 1280, and is dedicated to St. Michael. Instances of a change in the saintly dedication of churches are of rare occurrence. No record exists as to why the change was made here. Probably it was one of the many revolutions and alterations incident to the attempted suppression of the Saxon race. Mr. Eyton observes that he had been unable to discover that it had been done by any ecclesiastical authority. The church, as will be observed, consists of a nave, with north and south aisles, chancel, and chancel aisle. The arcades are of great beauty, and typically illustrate the style of the period. The bases of the pillars are, however, evidently of greater age than the pillars themselves, and may have been portions of the original Norman structure. They resemble very closely the bases of the pillars at Buildwas. The curious and almost grotesque carvings on some of the capitals are very interesting objects, and of unusual occurrence in a thirteenth-century church. The church was considerably damaged during the siege of the hall, after which it was, no doubt, repaired and put very much into the state in which Mr. Street found it in 1863. The inside walls, roof, and arcades were then covered with thick coats of plaster, and the bases of the pillars hidden beneath the flooring. Mr. Street, finding that he had good material to work upon, succeeded in transforming the interior into the splendid condition in which it appears now. This was done at a cost of 1,600*l.*, exclusive of the new south porch. The tower—then, as now, in excellent preservation—appears to be of later date than the body of the edifice. Its Perpendicular lines suggest its erection something like a century or more subsequently.

## THE NEW TOWN HALL, LERWICK.

THE new town hall in Lerwick, the chief town of Shetland, has been opened. The building is designed in the old Scottish style, with massive walls and crow-stepped gables. It stands on the most elevated part of the ridge on which the town of Lerwick is built, and adjoins the county buildings, with which it groups. The materials are local freestone, with Isle Edday stone dressings, the former being of a grey, the latter of a cream colour. The buildings belong to a limited liability company. The planning is as follows: On the ground-floor, burgh court-hall, measuring 24 feet by 30 feet; magistrates' rooms, safes, and police-cells. On the opposite side of the main corridor are Custom House offices and Inland Revenue offices, with various departmental offices and stores attached, and with entrance from the north elevation. On the first floor, which is reached by a wide stone stair, is placed the town hall, measuring 60 feet by 30 feet, and 25 feet high, with timber ceiling running up to the roof. On the left side of the main stair are placed refreshment and retiring rooms, and on the right side a reading and news room, 22 feet wide by 23 feet long. Over this portion of the building are two smaller halls, respectively measuring 22 feet by 23 feet, with smaller side-rooms and a staircase opening into the tower. These various halls and chambers have been arranged and grouped together so as to form a handsome structure. Externally, the front elevation presents a façade with a central gable, and turrets at the angles; while over the central staircase rises a tower 72 feet high, finished with corbelled turrets and battlemented cope, and designed to receive a clock and peal of bells. The main entrance to the hall, &c., is through a carved and moulded archway, over which is an oriel window corbelled out and surmounted by a steep-pitched gable. The hall occupies the whole front of the upper flat, and is lighted by means of oriels and four mullioned windows in front, in the south gable by mullioned and traceried windows, and on the north by a large traceried wheel window, with series of lancets below. The elevations are of simple design, boldly and broadly treated. In the front, the windows are placed over each other, and the dados between filled in with coats-of-arms of peers now or formerly connected with the district, as also historical subjects, the whole carved in Covesea stone. At the entrance are two handsome iron lamps, given by the decoration committee. They rest on polished blocks of granite from Roness Hill, in the north of Zetland. The coats of arms over the lower windows read as follows, beginning at the north end: 1st, Earls of Zetland and Morton, and in the centre the Dragon ship of the Vikings, copied from Orkneyinga Saga; 2nd, Earls of Orkney and Baron Sinclair,



with Lion of Norway, central shield; 3rd, Stuarts and Earl Caithness on the Lion of Scotland; 4th, Bothwell, Duke of Orkney, and Earl Rosslyn, and Galley of Orkney. The interspaces between shields have carved ferns, firs, thistle, and ropes respectively, and over the oriel window are placed the town arms of the burgh of Lerwick. On entering the corridor, the arms of the following towns are seen let into recesses of the wall, and forming an effective panel along the corridor, viz.: On the left the arms of Glasgow, Edinburgh, and Leith, presented by their respective corporations; on the right, the arms of Aberdeen and Dundee, those of Dundee being the gift of William Strong, merchant in that town, a native of Shetland Islands. In the staircase is carved an antique representation in stone of the Kirkwall town arms, presented by Mr. Peace, of Kirkwall. On the first floor is the hall, which presents an attractive appearance. The walls are in plaster, with a dado 4 feet high. The roof is formed of arched main ribs, the spaces between being panelled and lined with pitch pine. The main couples rest on stone corbels; the whole being designed for coloured decoration, though meantime the roof is only varnished and slightly stained. The hall is intended to serve for public concerts and meetings, and was originally designed to have an end gallery, which has been omitted for the present time, but which can be added at any future date. The hall is lighted by tracery windows, and these have been filled in with stained glass, the gift of various gentlemen interested in the prosperity of Lerwick. Commencing at the south gable are Harold Harfager and Jare Rognavald, Archbishop Evstein and Bishop William, gifted respectively by Earl of Zetland and Sheriff Thoms. The chimney-pieces are the gifts of Mr. T. R. Spence, of Uyea, and of Mr. L. F. U. Garriock, of Berry, and are formed of freestone, with columns and panels of Shetland serpentine of a green colour, which is found at Half Drunnie, near Uyea, and of marble from Burwick. The clock is the gift of Mr. J. B. Leask, in memory of his uncle. The window in the staircase was placed there by the Morton Lodge of Freemasons. The whole was designed by Mr. Alexander Ross, Inverness, the contractor for the works being Mr. John M. Aitken, Lerwick. The cost of the building, exclusive of gifts, will be about 4,500*l*.

### THE NEW DEWSBURY INFIRMARY.

ON to-day (Saturday) the new building for the Dewsbury and District General Infirmary will be opened. It was designed by Mr. A. H. Kirk, of the firm of Kirk & Sons, Huddersfield, after a minute examination of several of the principal infirmaries in England. It deserves to be mentioned that, although an unusual amount of labour was entailed on the architect, he generously rendered his services without cost to the committee.

The style adopted for the building is Gothic. The principal elevation is to the west, where there is a clock-tower 90 feet high. Above the visitors' entrance is an oriel window, over which is a sculptured group of *Charity*, beneath a canopy and flanked by shields bearing the arms of Dewsbury and Ravensthorpe. The arms of various other neighbouring towns are also carved on the western and northern fronts. The patients' doorway is in the north front, and is sheltered by a porch of glass and iron. The principal staircase is lighted by a three-light window filled with stained glass, the subject being *Christ Healing the Sick*. The stained-glass windows are by Mr. S. Evans, of Smethwick.

The large wards run north and south. They are lighted by lofty windows at the sides and at the south end, the upper ward having a balcony outside, which may be used by patients. Each window is in three parts, the two lowest sliding up and down in the ordinary way. That at the top works on hinges, and by an improved rack is readily adjusted. Ample ventilation is thus secured, but, to insure air beneath and around the beds, fresh air, warmed as it passes over double steam pipes, is admitted near the floor level by sliding grates, which are so placed as to be readily got at by the nurses when readjustment is necessary. Sherringham's ventilators are also used near the ceiling, and these are aided in each ward by a hot-air stove. In the angles near the south end and close to the ceiling are extracting-flues, regulated by Hayward's louvred ventilators. Mr. Ellison's radiator ventilators have also been employed. The ventilating globe lights also assist to convey away bad air. There are three of these, each having a large argand burner; but in no case do the products of combustion enter the apartments, the gases being carried outside the building by special flues. The chandeliers, lamps, &c., have been supplied by Messrs. Richardson, Ellison & Co., and Messrs. Winfield. A supply of air may come into the wards from the main corridors, in which there will always be "blow-through," the temperature being regulated, according to the season, by means of a hot-water warming apparatus. A special ward and the board-room have similar windows, the globe lights, and sliding ventilators, but in each of these apartments Messrs. Shorland & Co.'s Manchester hot-air grate has been introduced. There are smaller wards for single patients, lighted and heated in the ordinary way, and ventilated by Boyle's patent apparatus. The arrangements for the apartments provided for the honorary medical staff; and for those of the house surgeon and matron are similar. In all these, as in

the small wards, and in the chambers in the top storey, the store-rooms, &c., there are vertical ventilating tubes, with regulating valves for the admission of fresh air. The corridors are lighted east and west, and in the centre (on the north side), by large windows. There is through ventilation, and in addition an extracting flue passes up through the roof—an iron pipe running by the chimney of the heating apparatus, and a current of air is thus always flowing. Long lengths of iron pipes, and three coils fitted with hot water, will keep up the temperature in the corridors to such a degree as may be required. The ornamental metal work is by Messrs. Macfarlane & Co.

The flooring of all the rooms in the infirmary is of the best Stettin oak, those in the wards and in other departments being polished. The floors of the corridors, &c., are constructed by Messrs. Dennett & Ingle in their fireproof concrete, lined at the sides with encaustic tiles supplied by Messrs. Minton, Hollins & Co. In the corridors and throughout the building the plinths are of cement. The walls are of plaster, finished in Parian cement. In the basement is the dispensary, comprising surgery, doctors' examination and consulting rooms, with a larger apartment for out-patients. The floors of all these apartments are of wood blocks, chemically prepared, and laid, each piece on a compound of hot pitch and resin spread on a solid concrete bed. The kitchen has a floor of cement concrete, and contains a Leamington range, with hood over, coupled to a flue, so that the gases produced in cooking will be carried off. Food-lifts run from the basement storey to the lower and upper ward-kitchen. The apparatus is the patent of Messrs. Thomas & Sons, of Cardiff, and is incapable of being moved, except by means provided for the purpose, and which will be under control from any storey. Another hoist, known as the hydraulic telescopic-ram lift, runs from the basement to the top storey, and in it a patient brought in on an ambulance or a stretcher can be carried directly to the door of the operating theatre or to the upper wards. Safety appliances are provided. The apparatus is the manufacture of Messrs. Archibald Smith & Stevens. For the speedy and cleanly removal of dirty linen and sweepings "shoots" are provided. They communicate with apartments at the basements, the only doors to which are outside the building.

### THE EXCAVATIONS AT EPHEBUS.

A STATEMENT has been prepared by Mr. Beresford-Hope, the chairman of the committee, respecting Mr. Wood's proceedings at Ephesus during the past year. In March of the present year, the sanction of the trustees of the British Museum having been obtained, Mr. Wood was authorised by the committee to proceed to Ephesus and resume the excavations which had been so long in abeyance for want of funds. The freehold of the site of the temple had been purchased by the trustees of the British Museum during the time of the former excavations. Their right to resume the works seemed accordingly to be clear, although the question of the privilege of removing the sculptures which might be found was more disputed. Mr. Wood, however, had not long resumed his work when the Mudir of the district visited the spot, and reported their recommencement to the Kaimachan of Scala Nova, who in his turn reported the same to the Governor of Smyrna, and in due time the Mudir received his written instructions to stop the excavations. In obedience then to the intimation of the Mudir, Mr. Wood suspended the work, which he had then carried on for eleven days, and took the first boat for Constantinople to obtain a fresh permit from the Ottoman Government. This interruption delayed operations for several weeks, but happily the required document was eventually obtained through the effectual good offices of Lord Granville and of the Embassy at Constantinople, and in three days from the time when the request was submitted to the Sultan the permit was handed to Mr. Wood by the Minister of Public Instruction. Mr. Wood then returned without delay and resumed the excavations. By this time the cool weather had passed away, and the hot season had set in, but as he was anxious to make some important discovery before abandoning the work till the autumn, Mr. Wood persevered until June 15, when he was forced to stop, for not only did the heat prevent the workmen from doing a fair day's work, but the water still stood in the excavations at a level which prevented the recovery of the stones which could be felt through the mud.

Several interesting inscriptions and fragments of sculpture were, however, secured. The latter evidently belonged to the pediment at the east end of the temple. The most interesting of these was the leg of a male figure in high relief, somewhat larger than life.

At a committee meeting held on July 24 it was decided to authorise Mr. Wood to return to Ephesus in September and resume the excavations. The committee was justified in this decision by the fact that a large area had been opened up to an average depth of 17 feet in the few weeks of work during the spring and early summer, while the stones which could only be felt at that time through the mud and water could be easily removed in the autumn after the water will have subsided for a depth of several feet. It is most desirable that the archæological public



should subscribe liberally, if they desire the success of this most interesting exploration. If it is carried on as it ought to be to the extent proposed—namely, to the outer face of the colonnade which surrounded the temple—the result will probably be the unearthing both of beautiful sculptures and inscriptions possessing historical value. The discoveries which reach England will be placed in the gallery which is to be devoted at the British Museum to the Ephesian antiquities, and will be a great addition of permanent value to the national art treasures.

### NORTH STOKE CHURCH.

ONE of the places visited lately by the members of the Berkshire Archaeological Society was North Stoke, near Moulshford. The name was formerly Stoches—an inhabited or stockaded place. At one time it had a Saxon church built of masonry, and not of wood, as was usual in that locality. The present church was built by Milo Crispin, youngest son of Gilbert Crispin, and he called over the monks of Bec and conferred on them the manor of Swincombe. Milo Crispin, who died in 1107, had a half-brother on the establishment. At a later period the church was transferred to the convent at Bromhead, near Sunninghill; and it was reconstructed, on the old lines, between the years 1437 and 1461. At the Reformation the church came into the possession of St. John's College, Cambridge.

Mr. Jos. Morris said that the church was unusually symmetrical in plan, and consisted of nave, chancel, western tower, and porch. The chancel was Early English in style (c. 1200), and the rest of the church Decorated (c. 1320). The nave was divided into three bays, the windows being equally spaced and the doors opposite to each other. The walls were massive, being about 2 feet 10 inches thick; the windows were simple, but characteristic; the doorways were plain, but well proportioned; and the mouldings, though few, were effective. The door, with its ironwork, was as old as the wall on which it hung. The walls were out of the upright, having probably suffered from the thrust of the original roof, which had been replaced by one of later date (sixteenth century). The floor contained many old encaustic tiles of various patterns, chiefly geometrical and floral. The pulpit was good of its kind, and had escaped the common enemy of most wooden pulpits—the paint-brush. It was probably the work of the reign of James I. or Charles I.—1610 to 1630. Some frescoes had lately been exposed, of which the colours were very bright and the drawing clear. The font was very interesting, and probably dated from about 1200—the same period as the chancel. The windows in the north and south walls of the chancel were good. The shafts and abacus mouldings were of Purbeck marble. The carvings of the capitals were varied and curious, though rudely executed. The two openings near to the chapel arch seemed to be later insertions, and might possibly have been lepers' windows, the heads and sills being rebated as if to receive a door or shutter. The chancel arch was very fine, but was sadly crippled, having spread  $3\frac{1}{2}$  inches in the height of the shaft; the arch itself was probably built of true lancet form. The eastern window was originally of the Decorated period, the square head being apparently added at a later date. A piscina, a small recess, and a stone seat occurred along the south wall. The lower stage or basement of the tower was very bold and handsome. There was an intermixture of Early English and Decorated in the three windows, especially as the base windows seemed to belong to the latter period. There were three bells bearing date 1601, 1636, and 1727, and probably (though not necessarily) the rebuilding of the upper part of the tower was marked as having taken place at one of those times; if so, the latest was the most likely. There was an ancient bier, probably of date about 1680 or 1700, and some remains of the old oaken porch, which he attributed to the former half of the sixteenth century. On the south side of the church was a curious sun-dial. The head at the top appeared to be fourteenth-century work, and was beautifully executed, while the shield and hands were of ruder workmanship. There was an old apex stone on the east gable of the nave, and on the wall of the same gable a drip-course marked the line of the old roof of the chancel. There was quite sufficient left of the old oak porch to allow of its restoration; and he hoped that when the church was restored the present porch would be retained.

A paper by the Rev. W. S. Barns, on the frescoes lately discovered on the removal of the sounding-board from the pulpit, was read. From the few traces of designs as yet uncovered on the lower part of the walls, it is probable that incidents from the New Testament, or from the lives of the saints and martyrs, occupied the most conspicuous positions in the line of sight. Above these were a series of frescoes of much smaller size and more sombre colours, familiar subjects, possibly, from the Old Testament, such as would afford suggestive lessons to those who might see them and think of them. The two frescoes as yet uncovered may represent, the one on the left the persecution of the Israelites in Egypt, the one on the right the judgment of Solomon. Other suggestions may be forthcoming, if other members of the series are found, but as far as the details of the figures are clear,

the above seems the most likely interpretation. The fresco on the left hand, nearest the window, consists of a group of figures standing, and yet full of energy and motion. The figure on the right is drawn with much action, and is apparently an officer, with a battle-axe over his left shoulder: he is holding up his right hand to give emphasis to some order which the figure immediately in front of him appears to be carrying out. This one has a club over his left shoulder, and a scourge raised in his right hand; regardless of the protests of those who are grouped before him, he is carrying out the injunctions of his superior officer, and threatening the woe of the scourge if his orders be disobeyed. The fresco is probably an illustration of Exodus v. 10, and is especially interesting from the form of the battle-axe, which, to one skilled in Mediæval armour, might possibly determine its date, and from the other weapons and costumes found in the design. The second fresco consists of three figures, which are very distinct, and one which the friable nature of the plaster has not allowed as yet to be safely uncovered. On the left is a figure sitting on a throne, similar in form to the coronation-chair in Westminster Abbey of the same date, with a cap surmounted by a small round knob, such as distinguishes Sennacherib from his subjects in the Assyrian monument in the British Museum. In his right hand is a sword, like the sword of justice of the same period now to be seen in Westminster Abbey, and his left hand is raised and stretched out as if in the act of emphasising some final decision. Before him is a suppliant, holding forth the right hand in earnest entreaty, while with the left hand pointing to or holding an indistinct figure behind. At the other end of the design is another figure, with a face full of boldness and impudence, who appears to be making a counter-claim before the judge. Both frescoes are enclosed in an indistinct pale-green border of simple scroll-work, and call for great care in their treatment and preservation. Such examples of Mediæval art are becoming very rare. Restoration has brought many to light, but more to ruin; and this not always from carelessness, but from the difficulty of removing the many coats of whitewash under which they have been preserved, and from their friable condition when uncovered.

### LONDON THEATRES.

A REPORT from the Building Act committee on the structural defects of theatres and music-halls was read at last week's meeting of the Metropolitan Board of Works, and the recommendations therein were unanimously agreed to. In the case of the Theatre Royal, Haymarket, it was recommended that a revised notice should be served on the owner as to the structural defects of the building, containing twelve important requirements, the works to be commenced within two months, and completed within six months. The committee reported that they had instructed the superintending architect to inform the solicitor whether the works specified in the Board's notice to the owners of the Adelphi Theatre have been completed; and that, in the event of such not being the case, the solicitor will proceed, in pursuance of the resolution of the Board, for the penalties to which the owners have rendered themselves liable under the 11th section of the Act of 1878. The Imperial Theatre, Tothill Street, Westminster, required seventeen alterations to remedy defects. In the Olympic Theatre, Wych Street, Strand, so great are considered the structural defects that no fewer than twenty-two important alterations are required, involving the building of a brick wall to divide the stage from the auditorium, the principal staircase to be reconstructed, the present gallery staircase to be reconstructed and an additional one provided, and a staircase on the stage removed, an additional exit on the south side of the theatre, and a doorway from the external wall on the north side of the theatre leading into Maypole Alley, to form an exit from the stalls and private boxes on the north side, the pit refreshment bar to be removed, as well as the gallery refreshment bar, and six rows of seats in the south-east angle of the gallery to be removed. All openings between the theatre proper and the houses in Wych Street and Craven Buildings to be stopped up with brickwork or be closed with wrought-iron doors in wrought-iron frames, and the theatre premises to be separated from all adjoining premises. In the Standard Theatre, Shoreditch High Street, to remedy structural defects twenty-one alterations are required, the principal of which are that the theatre be separated from all adjoining premises vertically by brick walls, that all openings between the theatre and such premises be stopped up with brickwork, that the pit-stall entrance be made 6 feet wide, that the staircase from the balcony to the upper circle and the pass staircases from the dress-circle to the upper circle be rebuilt of solid tooled York or other approved stone. In Gatti's Music-hall, Westminster Bridge Road, the committee recommended no departure from the requisitions of the notice to the owners, and that the matter in dispute be referred to the arbitrator.

Ellison's Patent "Radiator" Ventilators, in conjunction with Stevens' Exhaust, have been used in the ventilation of the large Exhibition Annexe, Technical School, Huddersfield.





## St. Paul's Cathedral.

SIR,—Had it not been for the feeling that everything in the design of the East Minster or Cathedral dedicated to St. Paul is so nearly related to perfection, doubtless the segmental arches which appear to trouble the artistic soul of Mr. R. F. Conder would have been liberally condemned by all who study the unity of design.

The feeling of complete satisfaction with which some regard the great metropolitan church prevents them from inquiring too deeply into the "reason why" of certain points of detail, which, in the eyes of the critical, are positive defects. And perhaps the most glaring of these are the segmental arches on the diagonal faces of the octagon carrying the dome.

Of the few public objectors to these arches, only one or two suggest an architectural substitute. Mr. Fergusson suggested detached columns supporting a horizontal entablature and balcony; but, when the narrowness of the openings is compared with the great height, it will be seen that the diameter would prove a serious inconvenience to the free passage. Mr. Wightwick's suggestion to repeat the arched arrangement of the nave, &c., seems the most feasible, and it is on this that Mr. Conder appears to base his proposal.

Looking at the effective sketch accompanying the proposal, the work appears a comparatively easy one, involving little structural alteration, except perhaps the removal of the springers of the segmental arches, which would richly repay in appearance the necessary outlay in money and trouble.

The extra arch inserted under the front arch, in lieu of the straight-sided pieces of masonry of Wren's arrangement, just gives the breadth which the springing seems to require to satisfy the eye. But the way in which the whole building is brought into a continuous whole by carrying round the attic and semicircular arch under is the crowning feature of the scheme, and would undoubtedly give the greatest satisfaction, not only to those who are versed in the mysteries of design, and who have to decorate the interior, but also to the uninitiated.

The objections which may be raised against such an alteration, on the ground of interference with the work of Sir Christopher Wren, are of course weighty as far as they go; but why should a narrow sentimentality prevent the carrying out of a work which most must admit would prove a success, and tend to add to the stability of the structure?

St. Paul's is, and ever will be, one of, if not the, most magnificent buildings in the country, and any proposal which originates from a desire to complete the perfection of its style deserves the encouragement of a candid, and at the same time a kindly, criticism from all who are avowed admirers of the building.

Yours, &c.,  
EDWIN C. PINKS.

SIR,—Mr. Roger T. Conder's article on the diagonal sides of the octagon beneath the dome must have opened the eyes of many, and suggested the formation of a society for obstructing modern improvements, possibly. For my part, I should like to see a society formed for carrying out this one in marble, which marble need not be utterly foreign or glaringly in contrast with the remainder of the fabric, as regards colour or surface treatment; but the extra richness of the material would fittingly emphasise the domal area, and I may add that, as these four compartments are by their position exceptional and emphatic, this extra sumptuousness of material would enrich the whole interior of St. Paul's. There is a want of sympathy in Sir Christopher's arrangement—or shall I say rhythm?—which the drawing of last week's issue establishes very effectually by contrast, and a casual glance ought to be sufficient to show any ordinary observer that it is infinitely preferable for the transeptal aisle to read round into the choral than that they should be disrupted by what has been so ably shown to be a weakness and a flaw. Still, the subject is so interesting that I should like to see a better view published—one that would convince the most obstinate obstructionist that Art can be doomed to writhe under. There are too many such. But it may be a cool idea to ask anyone to draw to please them; and yet I believe there is a good deal in a drawing and the manner in which sometimes the public fancy may be taken, the truth being in the fact that that weakness, however new as to the pointing out of it, has been always there and always felt.

I hope we may be favoured with a view showing marble treatment. I could not make one, if I tried till the Greek Kalends.

Yours faithfully,  
H. W.

The Paris Municipality on Monday last voted 1,200,000 frs. for the purchase of the site of the Gallo-Roman Amphitheatre in the Rue Monge.

## LEGAL.

## High Court of Justice.

(Before Mr. Justice DENMAN.)

## THE SANDGATE LOCAL BOARD OF HEALTH v. LENEY.

This was an action brought by the Local Board of Sandgate against Mr. Leney, the owner of the Royal Kent Hotel in that town, to obtain an injunction against his building over a sewer which passes through a part of the yard of the hotel and to compel him to pull down so much of the building as was already erected. It appeared that some time before 1857 the then Local Board laid the sewer in question, a 12-inch pipe, at a depth of some 9 feet below the surface of the yard; and that disputes having arisen between Mr. Gidley, the then owner of the hotel, the predecessor of Mr. Leney, and the Local Board as to the Board's right to the sewer and other matters, an agreement was entered into by a deed between Mr. Gidley and the Board on February 14, 1857, in which the Board admitted that they had no right to the sewer without having made compensation to the owner of the yard. It was agreed that Mr. Gidley should allow the Board to continue the sewer, and, on the other hand, that Mr. Gidley and his successors should have the right to build over the sewer so long as such building should not injure or affect the sewer or prevent access to it on all requisite occasions. In June last Mr. Leney commenced the building now complained of, contending that he was entitled to do so in any way he pleased so long as the Local Board were allowed, when necessary, access to the sewer through the buildings, the Local Board at the same time being liable to make good any damage their operations might cause to the buildings. The Local Board, on the other hand, contended that the deed gave them access to the sewer along its whole length without entering upon any building or removing any superstructure, and they also complained that, from the nature of the building, the expense of the access to the sewer was materially increased by the necessity of taking precautions to prevent subsidence of the walls and other damage to the building. The Local Board applied in September of last year to the vacation judge for an injunction to prevent the continuance of the building until the action should be tried; but this was not granted, it being thought more convenient that Mr. Leney should be permitted to continue the building at the risk of having to pull it down if the action should result in a decision against him. The plaintiffs accordingly now claimed an injunction to prevent further building, and an order that the defendant should pull down such of the buildings already erected as interfered with the plaintiffs' right of access to the sewer.

His Lordship said that he ought not to grant a mandatory injunction unless there had been a substantial interference with the rights of the Board. He did not agree with the contention for the defendant that, unless access to the sewer was absolutely prevented, he was within the provisions of the agreement; he thought that the meaning of the agreement was that the Board should be able to have access to the sewer with reasonable rapidity in case of necessity, and the effect of the evidence was to show that the Board had now such access as was contemplated by the agreement. Judgment was accordingly entered for the defendant with costs.

(Before Mr. Justice KAY.)

## GARD v. THE COMMISSIONERS OF SEWERS FOR THE CITY OF LONDON.

## COMPULSORY PURCHASE.

This action arose out of the late fire in Wood Street, in the City of London. The action was brought by trustees on behalf of infants, the owners of two houses, Nos. 44 and 45 Wood Street. It appeared that the Commissioners of Sewers, under the powers of an Act of 57 Geo. III., had given notice to the plaintiffs of their intention to take the two houses in question for the purpose of widening Wood Street. It was admitted by the Commissioners that the houses only projected into the street to the extent of 5 feet 6 inches, and that, so far as concerned the rest of the houses, the intention of the Commissioners was to sell them with a view of thereby making a profit; and it was stated, and not denied, that they had in fact entered into an agreement to sell so much of the site as remained after widening the street and taking down and demolishing the existing buildings (which had been to a great extent destroyed by the fire) to the present tenants, for the erection thereon of larger premises. The plaintiffs contended that the Commissioners had no power to take more of the houses than was required for the purpose of widening the street, and accordingly brought this action for an injunction to restrain them from proceeding on the notice to treat. The question, therefore, resolved itself into one as to the powers of the Commissioners under the Act, by which it was in effect enacted that "If any house, wall, building, tenement, or hereditaments, or any part thereof, should be adjudged by the Commissioners to project into, obstruct, or prevent the altering, widening, or extending of any street, and that the possession, occupation, and purchase of such house, &c., would be necessary for that purpose," then the Commissioners might



compulsorily purchase such house, &c. The Commissioners had by a resolution formally adjudged that the whole of the houses, Nos. 44 and 45 Wood Street, projected into, obstructed, or prevented the widening of the street, and that the possession, occupation, and purchase of them was necessary for that purpose.

Mr. Justice Kay said that the Act of Parliament meant that the Commissioners were not to take more of the houses than they *bonâ fide* adjudged to be necessary for the physical purpose of widening the street, and did not extend to the taking of other and extra land beyond what was, in fact, wanted for that purpose. There might very often be cases where, at the moment of their adjudication, the Commissioners did not know exactly how much they wanted, and *bonâ fide* could not say whether they wanted five feet or five yards, and therefore they might *bonâ fide* adjudicate that a larger quantity was wanted than actually was necessary; but the contention that they could do that when they had come to a conclusion exactly as to what they did want seemed to him to be wrong. His Lordship therefore gave judgment declaring that the adjudication of the Commissioners was *ultra vires* and wrong, and restraining them from proceeding further with their notice to treat.

## CHURCH BUILDING AND RESTORATION.

**Augustine Church, Greenock.**—The memorial-stone of the Augustine Established Church has been laid by Mr. J. J. Grieve. The site of the building is at the corner of Belville Street and East William Street. The cost of the church will be about 3,400*l*. The contractor is Mr. W. Steele, and Mr. William Landless, of Glasgow, is the architect.

**St. Kew Church, Cornwall.**—This church was reopened on July 24 by the Bishop of Truro, after complete restoration, under the direction of Messrs. Hine & Odgers, Plymouth. It is one of the largest and loftiest of the three-aisle Cornish churches of the fifteenth century, and has a fine tower at the west end. The chancel is of unusual length. There is no chancel arch, but the divisional line was formed by a rood screen, of which only one or two fragments remain. The roofs are of the waggon type, and have been kept by the restorers in the original form. It was found the timbers only needed repair. Boarding, however, has taken the place of plaster in the panels between the carved oak ribs. At the feet of the rafters on each side are ranged a row of angels in their ancient positions. Those of the chancel roof have been painted and gilded to correspond with an existing one with original colour on it, which was found with other interesting remains hidden away in an old chest. There are many curious inscribed stones in "Delabole" slabs, which have been relaid as nearly as possible in their former positions. The floor under seats is chiefly formed of wood blocks laid herring-bone fashion. The chancel is paved with Maw's tiles; all the new fixed woodwork—which is admirably executed—is of oak. The eastern portion of the nave has fixed seats, with bench ends moulded and carved to agree with four ancient ends which have been refixed. There are double stalls on each side of the choir, elaborately carved. On the caps of the stall ends stand finely-sculptured angels, seven in number. The north and south chapels are separated from the chancel by parclooses of open-traceried work. A corresponding screen, but more richly carved, is carried along the western ends of choir and chapels, the height of the screens being about 11½ feet. The head of the opening into the chancel is cusped and crocketed, and doves have been introduced in the carving on either side. Conspicuous in the central screen is a fine piece of the original one. The stonework of the windows, doorways, and walls has been carefully restored with as little disturbance as possible of ancient material. The ancient glass of this church is of great interest, and the grand east window of the north chapel may be regarded as a remarkable "find," for before restoration it was in numberless obscure fragments. It was found to illustrate various events in the life of Christ—as His entry into Jerusalem, washing the disciples' feet, His agony in the garden, and before Pilate. It appears likely there was a second window further illustrating the Saviour's life. In the one restored there is scarcely any modern glass, and it is deemed the most perfect ancient window in Cornwall. The date of it is about 1470. At the east end of the south chapel there are remains of a fine "Jesse" window. All the glass work was executed by Messrs. Fouracre & Watson, under the architects' direction. The modern altar appointments are very beautiful, and much of the needlework has been executed by ladies of Clewer. At the celebration on the occasion of the opening of the church was used, for the first time, it is thought, for a century, the unique and valuable hanap or chalice of the date 1598, belonging to St. Kew, and one of the finest specimens of English silversmith's work of the kind in the kingdom. It was entrusted to Messrs. Singer & Sons, of Frome, for restoration. At the luncheon after the service Mr. Hine (architect) alluded to the interest Bishop (now Archbishop) Benson had taken in this restoration, and said he valued much the draft specification with His Grace's copious and practical marginal notes made during a lengthened visit to the church.

## GENERAL.

**Dr. Schliemann** has returned to Germany from Athens.

**A Statue of the late Earl of Beaconsfield**, subscribed for by the members, has been placed in the Conservative Club. The statue is the work of Count Gleichen.

**Sir John Lubbock** on Wednesday opened the Fine Art and Industrial Exhibition at Oldham, which has been inaugurated by the Corporation at a cost of about 20,000*l*.

**Mr. James Pegram** has presented to the Walker Art Gallery, Liverpool, the large picture by Mr. Dendy Sadler, entitled *Friday*, valued at 1,000*l*.

**An Art and Industrial Exhibition** was opened in the Aquarium buildings at Tynemouth on Monday.

**The Annual Meeting** of the members of the Royal Association for the Promotion of Fine Arts in Scotland was held on Tuesday in Edinburgh. A sum of about 200,000*l*. has been expended in the purchase of works of art by the managing committee during the past forty-nine years.

**A Carved Stone Pulpit**, designed by Mr. A. E. Dempster, architect, has been erected in All Saints Memorial Church, Birmingham.

**Mr. J. P. Pritchett, F.R.I.B.A.**, of Darlington, has designed a memorial tomb for the late Mr. R. H. Allan, to be erected in the West Cemetery, Darlington.

**Mr. Edge** has been appointed architect for the proposed new hospital at Bromsgrove, and has consented to waive all claims on the guardians in connection with plans previously prepared.

**Professor G. M. Humphry, M.D., F.R.S.**, has accepted the presidency of the Congress of the Sanitary Institute, which is to be held at Glasgow next month.

**Artisans' Dwellings** are to be erected at Rochester. A company is being formed to carry out the scheme, and land sufficient for 200 houses has been leased from the Bridge-wardens.

**The International Electric Exhibition** in Vienna will not be opened until August 16.

**A Subsidence of Land**, caused by mining operations, occurred on Wednesday morning at Boosbeck, in Cleveland. Seventeen dwelling-houses situate in Albion Street have been completely wrecked.

**The Crystal Palace Company's Report**, to be submitted at the half-yearly general meeting on the 9th inst., has a reference as to the desirability of removing the theatre from the building, on account of the cost and difficulty of insurance, and states that the directors have determined to advertise for designs and plans, with a view to obtain an estimate of the cost of a theatre to be erected outside the palace in the company's grounds.

**Mr. Horace Jones** stated at last week's meeting of the Common Council, that the stones of Temple Bar had been duly marked and removed to vacant land in Farringdon Street. They were now exposed to the weather, and every year they would get more decomposed.

**The Apex Stone of the Cross** on the western front of St Albans Cathedral was fixed by Sir Edmund Beckett, Bart., Q.C., on Tuesday. The extreme height of the cross is 109 feet 2½ inches from the floor of the porch, and it is more than a ton in weight. It is expected that within two months the work of rebuilding the west front—which is being done at the sole expense of Sir Edmund Beckett—will be completed.

**Lady John Scott**, of Spottiswoode, is at present personally superintending the opening of a supposed Picts' house or broch on a farm at Oust, Forss, about four or five miles to the south-west of Thurso. Very little has yet been done in the way of excavation. On Friday week two stone stairs, each containing sixteen steps, had been discovered in the north-east corner of the building, and almost opposite to these what seems to be an outlet.

**The Select Committee of the House of Lords** appointed to inquire into the Bill promoted by the Corporation of London for the removal of the ventilator in the roadway of Queen Victoria Street, decided on Wednesday that they had not the power to order its removal to another spot.

**Trade Marks Registration.**—The Registrar of Trade Marks has issued the following notice relative to the abandonment of applications. Rule 16 of the Rules under the Trade Marks Registration Acts is as follows: "In all cases where an applicant neglects to proceed with the registration of his mark within twelve months from the date of application, or within six months from the date of the expiry of the advertisement in the official journal, the Registrar may deem such application to be abandoned." It is intended to apply this rule from October 1, 1883, and it is important, therefore, that any person who has a pending application for the registration of a trade mark on record at the Registrar's office (whether lodged by himself or through an agent), and has neglected to proceed with the same as mentioned in the above rule, should take immediate steps to prevent such application from being cancelled by the Registrar as abandoned.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, AUGUST 4, 1883.

### CONTRACTS OPEN.

**ABERDEEN.**—Aug. 8.—For Addition to Library, King's College. H.M. Office of Works, Whitehall Place, S.W.  
**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.  
**ASHTON-UNDER-LYNE.**—For Building Three-storeyed Workshop. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.  
**BATLEY.**—Aug. 6.—For Additions to Inn. Mr. J. T. Law, Architect, 64 Commercial Street, Batley.  
**BELFAST.**—Aug. 6.—For Building Post-office. The District Engineer, Post-office, Belfast.  
**BLAYDON.**—Aug. 8.—For Building Workshop. Blaydon Ironworks Company, Blaydon-on-Tyne.  
**BOSTON.**—For Temporary Bridge and Reconstruction of Surfleet Bridge. Clerk of the Peace for Holland, Sessions House, Boston, Lincolnshire.  
**BURNLEY.**—For Building Bakery, Stables, Store-rooms, &c. Mr. C. Parsons, Architect, 9 Grimshawe Street, Burnley.  
**BURTON.**—Aug. 9.—For Building Beer and Barley Store. Mr. N. Joyce, Architect, Stafford.  
**CAMBRIDGE.**—Aug. 9.—For Building Premises, King Street, Mr. R. R. Rowe, Architect, 10 Emmanuel Street, Cambridge.  
**CARLISLE.**—Aug. 7.—For Construction of Public Baths in James Street. Mr. J. Hepworth, Gas and Waterworks Office, Carlisle.  
**CHESTER.**—Aug. 10.—For Erection of Parcels Post Building. Engineers' Office, Woodside Station, Birkenhead.  
**CLYNDU.**—Aug. 28.—For Building Board School. Mr. E. Sidney Hartland, 7 Rutland Street, Swansea.  
**COCKERMOUTH.**—Aug. 6.—For Building Double School, for 250 Boys and 210 Infants. Mr. R. S. Marsh, Surveyor, Cocker-mouth.  
**CORK.**—Aug. 9.—For Taking Down and Rebuilding part of Grenville Quay Wall. The City Engineer, 20 South Mall, Cork.  
**CUBITT TOWN, E.**—Aug. 7.—For Building Coffee Tavern. Mr. A. S. Cook, Architect, 14 Farnival's Inn, E.C.  
**DELPH.**—Aug. 14.—For Building Goods Warehouse. Mr. S. B. Worthington, C.E., Victoria Station, Manchester.  
**DUNGANNON.**—Aug. 15.—For Building Sunday School and Parochial Hall. Rev. Lewis Richards, Dungannon.  
**EASTWOOD.**—Aug. 11.—For Building Mission Church. Mr. J. B. Bailey, Architect, North Street, Keighley.  
**ECCELSFIELD.**—Aug. 11.—For Building Board Schools, &c., Wincobank. Messrs. Wilson & Masters, Architects, Hartshead Chambers, Sheffield.  
**EXETER.**—August.—For Building Asylum to Accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect 14 Farnival's Inn, E.C.  
**GLASGOW.**—Aug. 8.—For Works to College Station (Contract No. 2). Drawing at the Engineer's Office, St. Enoch Station, Glasgow.  
**GLOSSOP.**—For Building Brookfield Chapel. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.  
**GRAVESEND.**—Aug. 7.—For Additions and Alterations to Portion of Market Place to form Fire Engine Station, &c. Mr. Samuel Parr, Architect, 15 High Street, Gravesend.  
**HALIFAX.**—Aug. 10.—For Building Twenty-four Dwelling-houses. Messrs. Jackson & Fox, 22 George Street, Halifax.  
**HOMERTON.**—Aug. 6.—For Alterations and Additions to Union Workhouse. Mr. George Judge, Architect.  
**HOBURN.**—Aug. 6.—For Building Wesleyan Chapel. Mr. Walter Hanstock, Architect, Branch Road, Batley.  
**HUDDERSFIELD.**—Aug. 14.—For Building Goods Warehouse. Mr. S. B. Worthington, C.E., Victoria Station, Manchester.  
**NEWPORT.**—Aug. 14.—For Rebuilding Premises. Mr. A. O. Watkins, Architect, 113 Dock Street, Newport, Mon.

**NORMANTON.**—Aug. 4.—For Building School and Classroom. Mr. T. Reid, Architect, The Grove, Normanton.  
**PORT GORDON.**—Aug. 10.—For Building Dwelling-house. Mr. S. A. Bruce, Architect, Hotel Buildings, Banff.  
**PRUDHOE.**—Aug. 8.—For Construction of Passenger Station and Station Master's House. Mr. William Bell, Central Station, Newcastle-on-Tyne.  
**RODLEY.**—For Building Chapel and School. Mr. F. S. Smith, Architect, Yeadon.  
**SCARBOROUGH.**—Aug. 8.—For Improvements to Waiting Rooms and Station Offices. Mr. William Bell, North-Eastern Railway, York.  
**TIVERTON.**—Aug. 6.—For Building Entrance Lodge. Messrs. Packham & Croote, Architects, 93 Paris Street, Exeter.  
**TREDEGAR.**—Aug. 6.—For Additions and Alterations to Workhouse. Messrs. Blessey & Aspinall, Architects, Town Hall Chambers, Cardiff.  
**TYNEWYDD.**—Aug. 8.—For Building Police Station. Mr. J. F. Lambert, Town Hall Chambers, Bridgend.

### TENDERS.

**BRIGHTON.**  
 For the Brighton College. Mr. T. G. JACKSON, Architect.  
 Chappell . . . . . £7,347 0 0  
 Hoosman & Co. . . . . 7,184 7 6  
 Purmett & Sons . . . . . 6,700 0 0  
 Escourt . . . . . 6,683 0 0  
 Chesman & Co. . . . . 6,580 0 0  
 Barnes . . . . . 6,577 0 0  
 Parnell & Son, Rugby . . . . . 6,517 0 0  
 Griffiths, Brighton . . . . . 6,300 0 0  
 For Completion of Transepts and Side Chapels to St. Joseph's Church, Elm Grove, North Brighton. Mr. JOSEPH S. HANSOM, F.R.I.B.A., Architect, 27 Alfred Place West, South Kensington, S.W. Quantities by Mr. Henry Smith, 8 John Street, Adelphi, W.C.  
 Light, Portsmouth . . . . . £3,353 0 0  
 Whittingham, Newport, Salop . . . . . 3,700 0 0  
 Webber & Walker, Brighton . . . . . 3,684 0 0  
 Longley, Crawley, Sussex . . . . . 3,628 0 0  
 Tyerman, London . . . . . 3,038 0 0  
 Goddard & Sons, Farnham . . . . . 2,994 0 0  
 R. & E. Evans, London . . . . . 2,838 0 0

### BROMFIELD.

For Erection of Model Farm Buildings, suitable for the requirements of a Mixed Husbandry Farm as practised in Cumberland, at Beck Farm, Bromfield, Cumberland, for Mr. William Fletcher. Messrs. PICKERING & CROMPTON, Architects, Whitehaven, Quantities supplied.

#### Whole of the Works.

Mann & Robinson, Blennerhasset . . . . . £2,762 14 8  
 Bell & Wilson, Aspatria . . . . . 2,407 9 6  
 Pattinson Brough, Crookdale . . . . . 2,579 10 6  
 Lattimer, Measgate . . . . . 2,523 5 3  
 HOLLIDAY & BLACK, Carlisle (accepted) . . . . . 2,501 10 8  
 Moore, Wigton . . . . . 2,300 14 8

#### Part of the Works.

Lattimer, Carlisle, carpenter . . . . . 453 14 10  
 Reay, Cocker-mouth, carpenter . . . . . 435 15 0  
 Mandle, Maryport, slater . . . . . 255 0 0  
 Manson, Carlisle, slater . . . . . 238 10 6  
 Fell, Wigton, slater . . . . . 226 10 0  
 Casford, Whitehaven, slater . . . . . 227 19 5  
 Lattimer, Carlisle, slater . . . . . 225 1 6

### CARDIFF.

For Forming and Sewering certain Streets on the Craddock Wells Senior Charity Estate, Cardiff. Messrs. BLESSLEY & ASPINALL, Surveyors, Cardiff.  
 Thomas . . . . . £4,100 0 0  
 Allan . . . . . 3,493 2 3  
 Sheppard . . . . . 3,385 0 0  
 DAY (accepted) . . . . . 2,473 0 0  
 Rees . . . . . 2,293 0 0

### CORK.

For Building an Addition to the Cork School of Art. Messrs. HENRY & ARTHUR HILL, Architects, Cork. Quantities by Messrs. Gribbon & Butler.  
 T. O'Flynn . . . . . £6,029 0 0  
 Hill . . . . . 5,397 0 0  
 Roberts . . . . . 5,060 0 0  
 Delany . . . . . 5,012 0 0  
 E. & P. O'Flynn (withdrawn).

### COVENTRY.

For the Erection of a Pair of Cottages at Fillongley, for the Trustees of Bond's Hospital. Mr. WILLIAM TOMLINSON, Architect, Coventry.  
 Brown, Coventry . . . . . £609 0 0  
 Hallam & Co., Coventry . . . . . 607 0 0  
 Smith, Chilvers Coton . . . . . 846 0 0  
 Bacon & Son, Foleshill . . . . . 521 12 0  
 Wootton, Coventry . . . . . 513 10 0  
 Isaac, Foleshill . . . . . 609 0 0  
 Lester, Coventry . . . . . 507 0 0  
 Blakeman, Coventry . . . . . 492 4 7  
 Beacham, Allesley . . . . . 485 18 2  
 Terrell & Bennett, Corley Moor . . . . . 480 10 0  
 Mayo & Son, Coventry . . . . . 465 0 0  
 Wilson, Nuneaton . . . . . 447 4 6  
 Turner & Burdett, Earlsdon . . . . . 443 10 0

For the Erection of Schools and Offices in Cromwell Street, Earlsdon, for the Earlsdon Chapel Trustees. Mr. WILLIAM TOMLINSON, Architect, Coventry.  
 Bacon & Son, Foleshill . . . . . £1,282 0 0  
 Haywood, Coventry . . . . . 1,017 0 0  
 Hallam & Co., Coventry . . . . . 1,012 0 0  
 Waters, Coventry . . . . . 846 0 0  
 Wootton, Coventry . . . . . 927 10 0  
 Blakeman, Coventry . . . . . 917 6 0  
 Liggins, Coventry . . . . . 911 10 0  
 Mayo, Coventry . . . . . 855 0 0  
 Lester, Coventry . . . . . 848 0 0  
 Turner & Burdett, Earlsdon . . . . . 846 0 0  
 BEACHAM, Allesley (provisionally accepted) . . . . . 800 0 0

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For Additions and Alterations to Park View, Thurlow Park Road, West Dulwich, for Mr. A. C. Rich. Messrs. HAKERSON & FAWKNER, Architects.  
 Leafey . . . . . £852 0 0  
 Hooper . . . . . 762 0 0  
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 Pledge . . . . . 291 0 0  
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 PLEDGE (accepted) . . . . . £225 0 0

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 J. & F. Pinn, Pembury . . . . . 1,050 0 0  
 Head & Wallis, Lingfield . . . . . 1,047 0 0  
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 Sales Bros., Edenbridge . . . . . 995 7 6  
 Pledge, East Grinstead . . . . . 827 0 0  
 Foster, East Grinstead . . . . . 810 0 0  
 GOODWIN BROS., Edenbridge (accepted) . . . . . 810 0 0

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 Pinn Bros. . . . . 2,074 0 0  
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 Taylor & Son . . . . . 1,965 10 0  
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 Accepted Tenders.  
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 Scott, joiner . . . . . 108 10 8  
 Maun, plasterer . . . . . 16 0 0  
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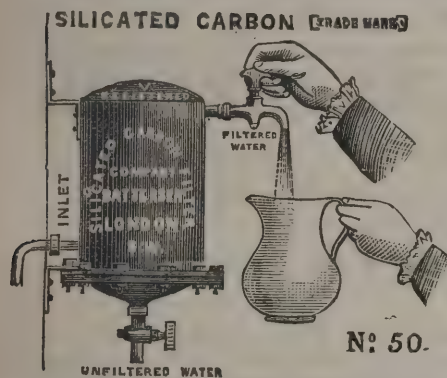
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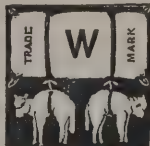
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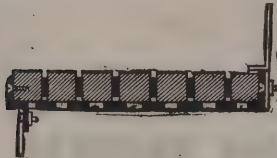
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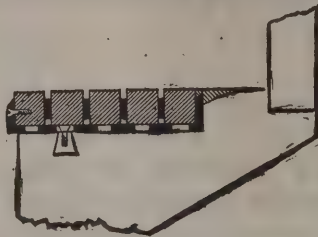
# LINDSAY'S IMPROVED PATENT REVERSIBLE TREADS & LANDINGS FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## THE UGLINESS OF TOWNS.



ALL towns, it is true, are not ugly. Neither, indeed, are the exceptions only such as to prove ugliness to be the rule. But it can scarcely be denied that English towns (leaving others out of the question), whenever they are worth looking at for their importance, are so seldom worth looking at for their beauty that the critic who pretends to anything like philosophical reflectiveness might not unfairly be invited to choose between two equally unpleasant conclusions—either that English civilisation has not yet reached so high a position as some people think, or that English civilisation and artistic feeling do not run together as they ought. To provide a way of escape from this little dilemma is not, however, our present purpose; we will go no further than to ask how far ugliness, or want of grace, is essential to modern town building, and by what means the introduction of a more presentable character may be most hopefully attempted.

It is of no use to allow ourselves to be persuaded by moralists of the more poetic or mystic order that the gracelessness of a great manufacturing or trading "centre" is the mysterious result of the inherent sinfulness or godlessness of man—that the steam-engine and the devil, in other words, have taken possession of the spot, destroyed the flowers of the field, shut out the landscape, and obscured with smoke the very sky, in order that the inhabitants may the better devote their bodily powers to the misery of toil, and their souls to consequent perdition. This may serve sufficiently well to attract the attention of humanitarians, in these days of hurryscurry and reading while we run, to a melancholy case; but it is not the way to promote that clear and correct view of the facts upon which alone the sober mind of modern society can be expected to proceed to an actual remedy. Let our first inquiry, therefore, be this—What is it that really produces ugliness, whether positively or negatively, in our towns?

The first answer seems to be that those conditions of modern business which bring about the development of a large town almost always induce the selection of a site, whether vacant or already partially occupied, which is in itself level ground, and which in most instances is also surrounded by comparatively level country, and through which, moreover, there probably flows a level and sluggish stream. In the next place, the same conditions are such as to produce in detail, in respect of building, designs and dispositions so wholly and urgently artificial that they disregard and virtually despise all those sentimental considerations which in better circumstances come to be so important an element in the handiwork of man. Even the art of beautifying the operations of building in the simplest way is thus a motive-power which in modern times does not come into any force till a late stage in the history of the town, and which then finds in most cases a very unfavourable basis to work upon. In the ancient world it may be said to have been otherwise; even as late as the middle ages an abbey, a noble church, or a castle, would from the first confer upon the surrounding settlement a higher character than its own, and indeed, in most cases, would once for all give an impulse of picturesqueness to the mode of building. But in our day it is a mill more likely than an abbey which has to be accepted as the nucleus of arrangement, and the rows and rows of mean brick boxes, with flat slate roofs and red chimney-pots, which are built in parallel ranks by lowest tender for the accommodation of the "hands," so emphatically postpone all questions of grace till a more convenient season, and so distinctly point to money-making and not pleasure-seeking, that the mere incidental repetition of the transaction financially becomes the very construction of all-pervading ugliness. Meanness of the meanest is the starting-point, and the whole course is meanness. Shops and warehouses, more mills and more cottages for the hands, churches and schools, offices of business and residences of ease, all are in their financial nature mean; ornamental in their way presently, no

doubt, but never gracious; recognising to the end the claims of individual profit passing into individual self-assertion, but never the superior claims of that public æsthetic gratification which, in all communities of sufficiently high culture, becomes, like moral order, the acknowledged law of individual action.

This is putting the case, we will admit, somewhat strongly; but it is the general principle of procedure which we are seeking to discern, and here it is; as we venture to think, plainly enough disclosed. The mere commercial element cannot be expected to produce grace in our towns; grace costs money, we are told; even if it only costs time, time to devise, time to choose, time to enjoy, that time itself is money. A popular writer gives an amusing account of his having been taken over an American "city" by one of its chief citizens. A number of avenues of most stately width and length converged upon a "place" of equal magnificence. But when the carriage had arrived at this central point, and while the municipal grandee was indicating with much pride the positions of the great public edifices and monuments, a wild cat sprang upon one of the horses and a wolf seized the other. The "city" existed as yet only in the form of lines marked out in the wilderness, and all its glories were to come. But let us not be content with smiling at the characteristic ambition of an adventurous village in the Far West; there is surely a better lesson to be learnt from the story. How is it that, even at this moment, in every important town in the British Kingdom, the provision which is being made for the extension of building is simply nothing? In a Western American village there is sufficient patriotic feeling to produce a public authority of some kind to control the future in the interest of order, and even to determine in good time beforehand such a scheme of judicious disposition as alone can effect a beneficial ultimate result. In continental cities, too many to be mentioned, the same description of authority governs in very much the same way. But in our towns at home there is absolutely nothing of the kind. It may be said that this want of system is part of the price we pay for liberty, and that the continental cities are "dragooned" or what not. But the Transatlantic communities are not dragooned, and we will say no more.

The more practical question before us is perhaps this. Given an English town, or a quarter of a town, which has been laid out and built upon principles confessedly ultra-commercial, and consequently in a certain meanness of spirit which is a negative, if not a positive, ugliness, what can be done to correct this very unsatisfactory character? There are whole regions, for example, in and about London, which are so palpably and wretchedly in this condition, that the casual visitor from what is only a less grievously afflicted neighbourhood in some other quarter finds himself wondering what can be done for the mere sake of the public credit for good sense. Can anything be done?

One thing that can be done is in fact now being done more than may be supposed. Whenever an opportunity occurs for building some prominent local edifice in a superior manner—a new church, for instance, a public establishment, large business premises, or even a row of new shop fronts—we may safely assert that it will always "pay" in one way or another to take the utmost care to have architectural design of the best with construction of the best. It need not be so much a matter of expense, but it is always a matter of pains. A few really good new buildings coming to be dotted about in a mean and neglected district will be found to give new life to the whole area, we may say new life to the inhabitants. The example will be followed in a variety of ways; sometimes in a very small way, and perhaps sometimes in an odd way, but the little leaven will leaven the lump, and we need only ask those who have the opportunity to try the experiment.

Another experiment which we confidently recommend—and we have only space to speak of this one—is this: that the owners of what may be called groups of small house property should enforce that kind of cleanliness and tidiness, externally to begin with, which makes all the difference in such cases between an aspect of poverty and one of plenty. This also will be found to pay. If rents do not rise in nominal amount, they will probably improve in actual security very promptly. But if it were of no further benefit than the improvement of appearances, the effect upon the spirits of the inhabitants must always be most beneficial. The dull artificiality of a meanly-built street may continue untouched, but, if cleanliness is next to godliness, tidiness may be a substitute for the picturesque.



Even a little paint will go a long way, and a cheap window-hanging will go much further. The ugliness of our inferior streets may still be denounced as a point of academical criticism, but even the most cynical of critics can afford to be a good deal less displeased, and all the more to conceal his displeasure, when he sees a little good taste in detail doing all that can be done as an apology.

## STUDIES OF SOME LONDON CHURCHES.

(Continued from page 64.)

AT the Church of *St. Thomas*, Lambeth, the work of the late Mr. S. S. TEULON, the chancel has aisles with compass roofs; arches on either side open out into the aisle, a kind of dormer roof being contrived in the latter, which enables the arches to be so much higher. There are shallow galleries to these aisles, and in the northern one the organist and singers are placed. This is not a bad idea for the position of an organ, instead of the ordinary organ chamber, but the singers ought to be on the ground-floor, not elevated above their fellow worshippers, as if they were mere performers. In this case there are no chancel seats, but only a prayer-desk with sides facing south and west. At the period of the writer's visit to this church, on a dreary mid-winter's day, a curious effect was produced by an open stove, the front of which was turned west not more than about some seven feet from the kneeling step. Consequently there was a glowing fire in front of the altar, reminding one of the burnt-offering of the Mosaic dispensation, but at the same time very distracting to the worshippers!

Not many yards distant is the *Roman Catholic Cathedral of St. George's*, Southwark, and thither the writer wended his steps, there being then no sacred function carried on. There are times and seasons when different effects are produced on the architectural mind, or, it may be, on other minds. It was not the first visit of the writer to PUGIN's work, but never was the interior more impressive than in the gloom and mist of this dark December day. The nave looked very fine, though it is deeply to be regretted that want of funds stopped the erection of vaulting, as the open-timbered roof is not properly "of a piece" with the rest of the architecture. The great rood under the choir arch standing out in front of the sombre distance of the space behind was very impressive. Of course the choir, for doctrinal and devotional reasons, is far more often lighted up with wax candles than left in darkness. A handsome screen, with or without a cross over it, is a great improvement to churches not only of the Roman but also of the English communion. The want of such a distinctive feature to separate nave from chancel is much felt in many a fine church. The beautiful geometric patterns of Roman mosaic in the nave passages of *St. George's* are far more effective than a tile pavement of richer design.

Could there be more of a contrast than in the alterations effected a year or two ago in two important London churches some way from each other—the one *St. Mark's*, North Audley Street, the other *St. George the Martyr*, Southwark? In the first a church which possessed no beauty of proportion or genuine architectural features has been transformed into a fine building, as if by the wand of the enchanter, while, ritually, all the proper arrangements for carrying on the services of the Church of England in a seemly manner have been made. In the second no structural alteration or material change in the fittings has been effected. However, when it is remembered that it was built during one of the duller periods of the life of the English Church (A.D. 1737) there is no cause for surprise. One ought to be thankful that the interior has been metaphorically warmed up and beautified by the application of the paint-pot, for the whole has been embellished in colour. The pews on the ground-floor and the gallery fronts are delicately decorated in a kind of Grecian style with grayish-white patterns. This rather tends to produce the effect of ivory inlay by its treatment; but the colour selected is not of the best. A warm buff ground would have given more the idea of boxwood inlay, and have been more suitable. It is also a great mistake to have thus treated the pews on the ground-floor in the same way as the gallery fronts. Alas! that we should have to speak of a church in a fashion which reminds one of a speculating builder's phraseology of "ground floor," "one pair," "two pair," &c. The colouring attracts too much

attention to a feature which in a church should be as retiring as possible. If painting a flat colour and gilding without any pattern had been adopted this would not have been so. The pew-doors happen to be nearly three times as wide as the pew ends, so that, though objectionable in principle, the doors could not very well be abolished. If the latter were swept away (and the remark applies to all pewed churches, not to this individual example) one may well ask what would become of the bland smile and the quiet "Good-morning" of the pew-opener, expectant of Christmas-boxes, to the seat-holder, the smile being given as if the greatest favour possible was being bestowed in admitting the hirer to his or her "box." However, there are free seats placed in a prominent though inconvenient situation in the centre of the nave, with a comparatively narrow alley on each side. This plan, a not unusual one, is fatal to all stateliness and ecclesiastical propriety, while, what is more important, it prevents a proper and seemly road for communicants up to the altar. The central passage would, too, look a fair width if even less than the dimension of the two narrow passages were added together. The colouring of the general ground-work of the ceiling is far too much like papering, and the border needlessly pretentious and out of proportion. There was no chancel arrangement, and the prayer-desk was much elevated, facing west. The organ and choir were in a west gallery, the top of the former almost touching the ceiling.

In plan, *St. Paul's*, Southwark, has a nave with clerestory and gabled aisles. The chancel has a semi-octagonal apse. There is a peculiar arrangement in the outer walls of the aisles—an unpierced arcade in which the windows are recessed, corresponding with that of the nave. But it is not intended for the purpose of throwing out an aisle hereafter, as is obvious by the plan of the responds. The effect of this feature is rather good, but it is not an economical device. Instead of the ordinary lead glazing in small quarries, large sheets of ground glass are used for the windows. This, as might be expected, has a cold and dreary look.

In the clever and, in many respects, beautiful Church of *All Saints*, Kensington Park, built in 1861, Mr. WILLIAM WHITE, with his usual enterprise, employed large sheets of glass, having patterns on them in quiet colours. But whatever advantage may have been expected by it, it does not harmonise with the architectural lines, and the ordinary quarry glazing is far preferable.

Though this article purposes to treat of churches, every rule has an exception, and the proximity of the well-known chapel of Mr. NEWMAN HALL, commonly called *Christ Church*, Westminster Bridge Road, to the before-named building induced the writer to peep into it. The first impression of a son of the Church of England, who most rarely puts his foot within the doors of a Nonconformist place of worship or a Roman Catholic church, was blank astonishment—astonishment that Nonconformists are so closely following in the paths of their Anglican brethren. The octagon in the centre, vaulted in wood, forms a very beautiful feature. Then there are nine steps up to the "chancel," which is of short length and has an uncovered table. There are stalls for the ministers, and the organ is placed on the north side in the ordinary way. There are painted glass windows, and a very large pulpit, reminding the spectator of those huge Continental examples more like a balcony, wherein the preacher can walk about and have plenty of room for vehement action and stirring eloquence. How extremes meet! In plain truth, this chapel is more like a Roman Catholic church than many Anglican buildings. There are many galleries, but this is not un-Roman, no more so than the hired-pew system, which unhappily is as prevalent in the Roman communion as in the English. The galleries, though not encroaching on the octagon, and well treated, unmistakably interfere with the internal effect. Still, taking it altogether, *Christ Church* is a work of great beauty, and has an interior putting to shame many of those of the Established Church.

The Church of *St. Saviour*, Warwick Road, Paddington, affords an example of gallery-front decoration which may be compared with one of the churches previously commented upon—*St. George's*, Southwark. The treatment is good, the panels ornamented with conventional representations of flowers in monochrome; the walls are scarcely decorated in colour at all, only sufficiently to harmonise with the elaborately-ornamented roof and other features. That painful appearance of crudity, rawness or cold, too often prevalent, is thus avoided. It is a



common notion that because roof or ceiling glows with colour the walls and other features underneath should necessarily follow suit. Whereas all that is desirable is that there should be some connection or harmony of the different parts of the structure which the varying circumstances of each particular case ought best to decide. The converse, however, is very different. Sometimes one sees properly ornamented walls teeming with figure subjects in decided tints and, overhead, a blank as far as colour goes. Need it be said the effect is disastrous to the eye educated as to what ought to be? A very handsome pulpit and prayer-desk have been placed in this church within the last few years, at the angles of both of which are beautiful little figures of apostles and saints. As regards a prayer-desk, it seems a pity to too much accentuate its sculpture. It may also be remarked that the junction between the carved superstructure and the stone base is too abrupt, and the stone figures against the wood background have a curious appearance; they do not seem to harmonise. The appropriate blending of two very different materials like wood and stone always requires great art and judgment in order to be successful.

A new apse to the chancel of *Holy Trinity Church*, opposite Portland Road Station, was added not long since. The only remark to be made about it is the peculiarity of the treatment of the chancel arch, which is of the same style as the church—Italian. There are pilasters against the east and west walls (the church, it should be mentioned, is not orientated, but stands with its axis north and south), but instead of these carrying an arch the whole width of the chancel, the bearing is judiciously sub-divided, two columns being placed a very short distance from the pilasters. Now this is a way of getting over a difficulty continually occurring, and which must occur in these days, when the want and convenience of wide chancels, well open to a perhaps wider nave, is so much felt. The objection that a pier or column of reasonable dimensions gets in the way, and obstructs the view in this situation, is surely untenable. It is very different from a range of columns in a nave arcade, where the vision towards the east is cut off at a variety of angles. In old examples, as at a church in Kent, is an arch with a triplet chancel arch, *i.e.* a wide one in the centre and a narrow one on either side, and in modern work, there is another instance at St. Antholin, Nunhead. A practical and constructional advantage is thus found; wide and lofty chancel arches, however effective, require considerable abutment, and in London and in confined sites it is not always possible to get this. It is a common Arab saying that “the arch never sleeps.” So if, instead of smaller arches flanking the central one, a system of corbelling over was adopted, the thrust would be proportionately diminished, and a somewhat novel, though perfectly legitimate, effect produced.

(To be continued.)

## PARIS NOTES.

LAST Saturday the definitive judgment in the competition for the Prix de Rome in Architecture was delivered at the Ecole des Beaux-Arts, the jurors being MM. Lesueur, Questel, Ballu, Garnier, Abadie, Bailly, Vaudremer, Ginain, Guénepin, Pascal, André, and Guadet. The subject given, as announced in last week's *Architect*, was “a mausoleum for the founder of a great state, his successors, and other worthies of the country,” and the prize-takers are: M. Redon, First Grand Prix; M. Quatesons, Second Grand Prix; and M. Deffrass, 2nd Second Grand Prix. Under a donation made by the Duchesse de Cambacérès, the winners of the 1st Second Grand Prix in the four sections of Painting, Sculpture, Architecture, and Engraving each receive the sum of 1,000 frs. The young artists benefiting by this liberal gift are M. Friant, pupil of M. Cabanel; M. Puech, pupil of MM. Jouffroy, Falquière, and Chapu; and M. Quatesons. As there has been no competition this year in engraving, the winner of the Second Grand Prix in 1884 will receive the sum of 2,000 frs.

The annual public meeting of the Ecole des Beaux-Arts has been fixed for October 20 next. Previous to this *réunion* an election will be held to replace MM. Felsing of Darmstadt and Ferstel of Vienna, foreign associated members, lately deceased. The sub-committee appointed to examine the various candidatures put forward has reported in favour of the following: (1) M. Mercuri, engraver, Rome; (2) M. Monteverle, sculptor, Rome; (3) M. Hausen, architect, Vienna; and (4) M. Geefs, sculptor, Brussels.

The public subscription opened to raise a monument to General Chanzy and the army of the Loire now amounts to 100,000 frs. The committee charged with the application of this sum has fixed upon the town of Le Mans as the most fitting spot for the erection of this memorial, and entrusted its execution to the eminent sculptors MM. Crank and Croisy.

In the competition for the design of the new Salon medal, the jury, after no less than five ballotings, adopted that of M. Daniel Dupuis, the second prize being awarded to M. A. Dubois, and the third to M. Bottée. The victorious design consists of a woman, seated, holding in one hand a palm, and with the other placing a crown on the head of an artist kneeling at her feet. Around the latter lie symbols of the various branches of art represented at the yearly Salons—a palette for painting, a hammer and chisel for sculpture, a broken column with its capital for architecture, a compass, rule, and square for drawing, &c.

The whole of the masterpieces by modern French painters in the Exposition de Chefs-d'Œuvre, now on view at the Georges Petit Gallery, are about to be engraved, and will be published in fortnightly parts, each devoted to one artist, and accompanied by a critical biography from the pen of M. Albert Wolff, the art critic. The first numbers will be devoted to Corot and Millet.

An exhibition of the works of the late E. Manet is about to be organised at the Ecole des Beaux-Arts by the members of his family, which includes the sculptor Lehnendorf, his brother-in-law. There was at first some indecision as to whether it should consist of only the completed and specially-characteristic works, or should comprise all his paintings, whether finished or not, drawings, sketches, pastels, &c. It has been decided to adopt the latter course.

The bronze figure symbolising the defence of Paris during the war of 1870 has just been placed on the pedestal in the Rond Point, at Courbevoie, where a statue of Napoleon I. once stood. It will be solemnly inaugurated on Sunday next, the 12th inst. The effect of the statue now that it is in position is not satisfactory. The groups appear too small for the granite pedestal, the summit of which is upwards of 13 feet from the ground; no carvings or other decorations, moreover, have been superposed to relieve the plainness of this great mass of stone, and certainly no picturesqueness is added by the simple iron railing that surrounds it.

The death is announced of the painter Cot, from inflammation of the lungs, after only a fortnight's illness. The best known works of the deceased artist are *Le Printemps* and *Pendant l'Orage*, which have been repeatedly reproduced.

A colossal winged statue of *Victory*, brought from the island of Samothrace, has lately been erected in the Louvre, on the landing of the great staircase of the Pavillon Denon. Some fragments had already been exhibited in one of the rooms on the ground floor. The figure has been reconstituted by M. Ravaisson, Director of Antiquities, but the head and arms are still wanting. It has been placed on the prow of a marble galley recently brought to France by M. Champoiseau, the French consul at the Piræus.

M. Germain Bapst, the learned bibliophile and collector, has returned to Paris, after fulfilling the mission in the Caucasus with which he had been entrusted by the Minister of Public Instruction and Fine Arts. He visited Georgia, Armenia, and Daghestan, being everywhere received in most cordial fashion by the Russian authorities, and has been enabled to bring home some archaeological and industrial specimens of great value. These will be placed in the Museum of Decorative Art.

The French occupation of Tunis has done something for archaeology. At last week's sitting of the Académie des Inscriptions et Belles-Lettres a communication was read from M. Cogniart upon the remains of Roman buildings and public monuments in the land of the Carthaginians. Many temples and other buildings have been lately discovered, for the most part in an excellent state of preservation.

**The Report** of the Improved Industrial Dwellings Company (Limited), states that the company now possess 32 estates in various parts of the metropolis, on which 4,144 dwellings have been erected and are in occupation, and 615 are in course of erection, making a total of 4,759 tenements. When these are completed the number of persons residing in the company's dwellings will be nearly 25,000. The expenditure on capital account has reached 814,890/.



## OUR LOSSES THROUGH CHURCH RESTORATION.\*

THESE meetings which we hold year by year in different parts of the country are not simply for our own instruction. We do, indeed, learn much by them; but, if that were our only aim, it would be better to travel more privately and in smaller parties. We come as we do that we may interest others in what interests us. We wish to spread the study of archæology, partly because we hold it to be a good thing for men to know something of what has been before them, and partly because the more the men who do so, the less is the likelihood of objects of archæological value being destroyed or allowed to perish for want of a helping hand from one who knows their worth. It is our custom to divide our work into three sections; and of these, that of Architecture, over which I have the honour to preside this year, seems to call for our missionary efforts even more than the others. It differs from them in that its subject is a fine art as well as matter for historical study. And it is most important to understand well and clearly the difference between the artistic and the historical side of architecture. Much harm has come to our old buildings from the confounding of them. A man cannot properly read the record of an old building without having some appreciation of its art qualities; but the converse is not true, and there are men whom we respect as architects or critics, whilst we are obliged to condemn what they do or recommend in their dealing with old work.

Next after actual writing we have in nothing so complete a record of the past as in its buildings. They are, as it were, history crystallised. Every age has built to suit its own wants and tastes, and we can learn of them from what is left. A building long in use has to tell us not of its first builders only, but of them who have used it all through its being. Domestic buildings tell us of the home life and public buildings of the common life of those who inhabited them. The latter being generally more lasting and less subject to change than the others have more to tell us, and of them those consecrated in religious use have most of all. Here in England the only really public buildings of great age which we have are our churches. But what a history is theirs! Beginning even before England was England, they have passed through their good times and their bad times, and are still in full life, and in truth more vigorous now than they have been for centuries. The contemporary of fifty generations has much to tell us. How, then, shall we bear with patience those who erase the old and forge new, until they leave nothing but a blurred and falsified record of one period only. That, however, is the ideal of the "restorers," even of those who make their boast that they are "conservative"; and if they have seldom quite reached it, it is because the record of the churches is so much a part of their very being that it cannot be altogether taken from them except by demolition.

But "restoration," bad as it is, is part of the history of the buildings. It is the chapter added in our own time. Their whole story is made up of changes, and what gives them their greatest interest is the fact that each generation of users has "improved" them, for good or evil, according to its own ideas. And in a living body this must go on. The great church revival of our time must needs show itself in the fabric, and it is useless for us to attempt to prevent it, even if we wished. But no true antiquary should desire to stop the life of a still living building. What we can and ought to do is to teach men how to value the old, and how to record the history of their own times without obliterating that of times past. Forty years ago the buildings were in a condition which can only be described as indecent, and the revival of life within the Church herself could not but produce some change in them. But that change need not have taken the form which is called "restoration." That it did so is due to the contemporary revival of the study of an old architecture, which study was quickly carried out to the furthest ends of the land by the archæological and architectural societies. The societies taught men to know something about the churches, and to distinguish in detail between, for instance, work of the thirteenth century and that of the fifteenth. But the knowledge was very imperfect, and the zeal of those who were showing the architectural merits of our neglected national buildings, and were striving to bring back the old style into actual use, too often made them regard as of no value everything which was not of their favourite style, and even, sometimes, everything which was not of the particular form of the style which they held to be the best. Thus grew the idea of "restoration" as we know it. In putting a church in order men aimed at making it a good specimen of what they called its "period," not knowing that in ninety-nine cases out of the hundred the church dates back far further than its history can be traced, and forgetting that modern imitation of old work cannot belong to any period at all except that which produced it.

We may admit that, looked at ecclesiastically, churches are now in a better state than they were. But even those which have passed through the hands of good architects have lost greatly in

value, and the much larger number less fortunate are mere wrecks. Now, I contend that the improvement might have been made, and in future may be made, without the mischief, for which, I repeat, the societies are chiefly responsible. There have always been a few amongst us who have known better, and the societies are not directly to blame for the worst barbarisms. But they have popularised the doctrine of "restoration," which, as interpreted by ignorant pretenders, has led to the deplorable results which we see. We need not be ashamed to confess our share in producing the evil, and the very magnitude of it may encourage us in attempting to stay it. The societies have raised the restoration fiend, and they must lay him. The adaptation of the churches to the needs of each generation of users is their very life, and, if it be properly done, it will still, as it has, aforesaid, add to their value. We cannot, even if we would, stop history, but we may do much to guide it. We must recognise the fact that even the worst of "restorations" generally come of a good motive. Parsons and churchwardens are not often mere barbarians, bent on the destruction of the buildings in their charge simply for mischief's sake. Their wish is to make them more fit for their high purpose, and if they do harm it is because they know no better, and those to whom they look for advice give them that which is worse than none. They "restore" the churches because they have been taught by precept and example that such is the proper treatment for them; and if we can teach them a more excellent way I believe that they will be as ready to follow it, whereas if we only rail indiscriminately at all alterations in old churches, we shall gain no hearing from their guardians. The first lesson to be taught men is that their duty towards an old church is not to "restore," but to preserve it; and this will generally best be done by showing them how it came to be what it is; how it grew from a perhaps much smaller building till it came to be what they now see; how each successive addition and alteration had a distinct use and meaning; and however the pedantic advocate of "period" may rail at it as a disfigurement or an innovation, is generally an improvement to the building.

Next show them that the building being many centuries old, the marks of age which it bears upon it are not defects, but honourable scars. Taking only the æsthetic view, the appearance of venerable age is far more pleasing than that of smart and shiny newness which the average "restorer" would put in its place. Defects which affect the soundness of the fabric must be made good, for both the present and the future use of the church require that it shall be kept in a state of sound repair. The maintenance or recovery of robust health are very different from a false and superficial affectation of youth. Judicious and necessary repairs will neither lessen nor falsify the church's record. But repairs which aim at bringing it back to the date which somebody thinks it was in at some particular date in its past are neither judicious nor necessary. As the changes of old always had a distinct end in view, either practical or æsthetic, so should it be with ours. We do no harm in adding whatever our convenience or our present sense of ecclesiastical decency may call for, provided that it be good of its sort, and make no pretension to be otherwise than what it is; and ancient objects of furniture where use still remains may and ought to be repaired if they need it. An old font, for example, may properly receive a new lining or a cover; but objects where use is obsolete—an Easter sepulchre, for example—should never be touched, except to preserve them from further harm than has already befallen them. The like, too, of tombs and monuments which have no practical use. The things belong to the past. Their record is done, and to "restore" them will only obscure or falsify it, and cannot add to the convenience, and will certainly take off from the architectural effect of the building. Our forefathers had not learned the historical value of buildings, and seldom hesitated to pull down older work to make way for that of their own time, which they believed to be better. We, however, who have learned it must be careful in adding our chapter not to erase former ones. Many works of the eighteenth century, and perhaps more of the nineteenth, both disfigure the churches and interfere with their proper use, but I would not have the record of even these entirely done away. Side galleries and box pews are degradations which we may be well rid of. But the fact that such things have been is not without its interest in the history of the church, although its nearness to our own time makes it seem the less important to us. A hundred years hence it will be difficult for men to understand how vast is the change which is being made in the second half of this century; and they who now press forward the improved state of things will do well to leave some evidence of what they have effected even if they can regard it only as a trophy of victory. But I believe that at no date has everything been absolutely bad. In the seventeenth century, and later still, our churches received much which served well both for their use and ornament, yet for years our "restorers" have been destroying these things, often putting very mean substitutes into their places, and for no better reason than that they are not "Gothic." Now, it cannot be too often repeated that it is not the architectural style of a thing, but its fitness to its place and purpose by which it should be judged. And, at any rate, a carved oak pulpit or screen of the time of Charles I. is, in every sense, nearer to the work of the middle ages than is a trumpery Caen

\* An address delivered at the opening of the Architectural Section of the Meeting of the Archæological Institute at Lewes, by Mr. J. T. Micklethwaite, F.S.A., President.



stone or varnished pine affair of the time of Queen Victoria, however "Gothic" it may be. Some men, too, have destroyed things for polemical reasons, which I cannot discuss here. But I would hint a man may renounce Lord Penzance and all his work, without taking away the board upon which his forefathers of the time of Charles II. and Queen Anne painted the Royal Arms as a witness of their loyalty to the Constitution. And the like also of some things in the opposite direction.

Men must also be taught not to despise fragments. Many a scrap which of itself seems almost worthless is most important to the history of the building to which it belongs, and the more precious as a fragment because it may be all that is left of an otherwise lost chapter. And there is another reason why such should be respected. I have said that the only safeguard for an old building is to teach its guardians to understand and value it. And a bit of old painted glass or sculpture, for example, which the general antiquary may regard lightly because he has seen better elsewhere, has a teaching power impossible to over-estimate. It is not enough for us to write books and papers. If we wish to make the lesson remain we must show examples, and examples near at hand, which men can study at their leisure. It is but empty talk to the many when we tell how the workers of old went on ever changing their style, first for the better, as the gathering experience of generations taught them more and more to know their material and their power over it, and then for the worse, when in the pride of craftsmanship they thought more of technical than of the artistic qualities of their work, and both sank together for want of the wholesome good of a noble aim, until the very art itself was lost. But let a man find in his own parish church what is described in the book, and the words have a meaning. The bit of glass, or whatever it may be, then at home in its place, and doing the work that it was from the first intended to do, will teach more and give more real pleasure than can ever be got out of the like piece stowed away in the museum of a great town, even to one who may have the opportunity to study it there, which the great part of those whom we would interest have not. Museums and collections have their use, for much would be lost if they were not. But after all they are necessary evils. They are the melancholy hospitals of the houseless orphans of art; and nothing ought to be removed to one of them so long as it has a native home of its own in which it may safely dwell.

Modern architecture is not a subject which concerns us as antiquarians, but I may be allowed to say a few words about it in so much as it affects the old buildings. One of the charges we bring against the "restorers" is that they deliberately strive to make their modern alterations such as may pass for old work, and so far as they succeed in their object they falsify the history of the buildings they treat by making it impossible to distinguish the real old from the forged old with which it is mixed. Some of the more learned pride themselves on reproducing not merely the old style, but minute local varieties of style. Now, the effect of all this is not to raise the new work to the dignity of the old, as they seem to think, but to lower the old to that of the new. It has ceased to be old and become a nineteenth century copy of old, none the less modern because worked up with the rest. There are parts which really are what the whole pretends to be. Thus the very skill and learning of the architect makes him a greater enemy to the building than even the ignorant and blundering pretenders whose doings have so often disgusted us. They indeed defile everything they touch, but if they do leave anything old it is still possible to recognise it for what it is. If whilst preserving the past history we are to carry it on to our time, whatever we do must show itself plainly to be of our time. The old builders in like case had no difficulty, for, as they worked in a traditional and always changing style, their work dates itself. But the old tradition has long been dead, and we have not yet succeeded in making a new one. I believe that it will come in the end, and that even now we are unconsciously working towards it. But meanwhile each architect must choose a style for his own use. He cannot invent one. No single mind ever did that nor ever will. And the frightful productions of the few misguided ones who have tried to do so in our time may serve as scarecrows to warn off others. A new style must grow out of what has been before, as all the old ones have done. Originality, when we find it, has not come of seeking, but the artist having new thoughts to express has moulded his style with such form as will express them. And so it may be new if, instead of troubling ourselves about pedantical correctness, and seeking excitement by trying first one style and then another, each man will select one which seems to him best fitted for modern purposes, and will then use it to express his own ideas just as he uses his mother tongue, neither violating recognised rules of grammar on one hand, nor in the other hesitating to introduce a new word or phrase where such is necessary to express his thought. Whatever new work we do in old churches must, as things now are, be in a style which we have learned by the study of old churches. Local varieties of style, too, deserve attention, for they generally have been influenced by the nature of the local materials. Let us use the old freely as a guide, but never reproduce it, and especially not copy in an old building details from its old parts, as has nearly always been done by the "restorers."

An old church often possesses articles which are as much parts of its history as the fabric itself. Amongst them the plate is the most important, and it is also the most of all in danger of being lost where the clergy and churchwardens are ignorant of its real value. A good work therefore for any society is to instruct them, and our friends of Cumberland and Westmoreland have shown us a most effectual way of doing it by their publication of a complete account of all the church plate in those counties. And I am glad to say that this example is being followed by other societies, and amongst them by that of the county we are now visiting. They could not do a better work, for nothing will make men value what is in their keeping so much as seeing that others care for it, and the fact that every article is known to be entered in a printed list will be a very strong safeguard against its alteration. Besides which, the work of making the lists is leading to many interesting discoveries. Already it has doubled the number of known examples of Mediæval English plate, and more are certain to be found, besides many valuable articles of later date at present unknown. The bells, too, have been catalogued in many places, and should be where they are not. The books and papers should be taken next, and either with them or with the plate should be noted these miscellaneous articles of movable property which churches possess, and amongst which are sometimes things of the highest interest. For the making of these lists we can only look to the local societies, and it will find them work for some time to come. But they ought to begin at once, for the destruction which they are intended to stop is going on daily. It is not long since the oldest English chalice known was sold from the church to which it belonged, and only saved from destruction by its fortunately coming under the notice of one of our members. It is now in the British Museum, where at least it is safe. But it would have been better to have left it in the church to which it has probably belonged for six or seven centuries.

Men particularly need to be taught the value of these movable articles, and that they should not be destroyed simply because they are out of fashion or past service. Let them get new and better if they like—it is well that they should do so, but let them keep the old for its own sake and the associations which belong to it. The metal of an old chalice is only worth a few shillings, which even the present parish need not grudge. Such things should not be stowed away out of sight, or left lying about where they are in danger of loss or injury, but carefully preserved in some safe place in the church where they can be seen by those who care to do so. Nor do I see why other antiquities should not be put with them there. I am sure that it is no desecration of an ancient parish church, full of history itself, to add to its other uses that of being the parish museum, and so let it extend the protection of sanctity to those few relics of which, ancient though they be, it is the still living contemporary.

## THE WELLINGTON MONUMENT IN ST. PAUL'S CATHEDRAL.

THE subjoined memorial, which has been signed by several members of Parliament, has been sent to Mr. Gladstone:—

1. That the late Alfred Stevens, an artist of acknowledged genius, designed a monument to the late Duke of Wellington, according to certain special conditions.
2. That the design was selected by Her Majesty's Government because it complied with those conditions.
3. That the monument was designed to be placed under one of the nave arches of St. Paul's Cathedral.
4. That the monument has been only partially carried out, and has not been placed in the nave, but has been relegated to the Consistory Court, on the south side of the cathedral.
5. That the full-sized model of the equestrian figure to surmount and complete the monument is preserved in the crypt of St. Paul's Cathedral.
6. That a wooden screen across the Consistory Court mars the effect of the monument, and prevents its being seen from the nave.
7. That the incomplete monument, therefore, stands on a site for which it was not intended, and where it is impossible to study its merits, or even to see the whole of the design.
8. That in the opinion of the memorialists, justice to the merits of a noble work of art and to the memory of the great Duke of Wellington requires that the monument should be completed, according to the intention of the artist, and that it should be removed to the site for which it was specially designed.

Your memorialists, therefore, pray that Her Majesty's Government will appoint a committee of experts to advise upon the completion of the monument, and its transfer to the site originally designated for it.

A memorial to the same effect, signed by artists and students of art, has also been forwarded to the Prime Minister, and a representation from the Royal Academy as a corporate body.

Mr. Marcus Stone, A.R.A., suggests that a reproduction of Stevens's monument, on a larger scale, and surmounted by the



equestrian statue, should be erected at Hyde Park Corner. There would be no difficulty in making an enlargement, and the melting of the old absurdity by Wyatt would furnish an ample supply of bronze.

Mr. J. R. Clayton writes in reference to the letter by Lord John Manners, which was published last week: It is quite true, as stated by his lordship, that at the time of the competition for this work he became "handsomely abused" for his selection of the design by Stevens. He does not, however, further explain that this abuse arose, not so much in impeachment of his decision in commissioning Stevens to execute his surpassingly fine design, as on behalf of other competitors who felt aggrieved on a side issue. These artists had, by the verdict of the judges appointed to award the prizes, won respectively the first and second places in the event, which was to Stevens a defeat.

This award, however, did not, by the terms of the competition, bind the Chief Commissioner of Works, who exercised a deeper foresight and his liberty of judgment by giving the commission to Stevens. At the result was expressed a good deal of irritation and the "handsome abuse" alluded to by his lordship. From this circumstance arose an unfortunate disposition to silence complaint and please everybody at all hazards. To this end the site for the monument was changed from beneath one of the spans of the nave arcade to the centre of the Consistory Court. On the piers of the nave arcade it was impossible to employ the malcontent artists, so to divide among three the loaf intended for one. The walls of the Consistory Court offered what seemed a convenient escape from the difficulty, not, however, without creating for Stevens another which followed him to the death. At either of the apse-like ends of the Consistory Court may be seen the result of this unfortunate compromise in the bassi-rilievi executed by the disappointed competitors for a solatium of 6,000*l.* This sum—so large a proportion—was deducted from the 20,000*l.* for which Stevens was to execute the monument itself. To aver that Stevens submitted to the condition of changed site is only to say that his submission was one of many which he had to make under "Hobson's choice." Thus the fund for his work was cruelly reduced; the surmounting group culminating his composition was denied him. He had to endure the destructive injury of Wren's screen in front of his work, to see his creation robbed of its due lighting, and to find it subject, from restricted space, to a distorting foreshortening which to any such composition could be nothing less than fatal. It may here be remarked that none of these influences, injurious as they were, induced Stevens to modify his design, upon which he had unswervingly fixed his heart and staked his reputation. The difficulty which Lord John Manners has expressed in reference to the sacrifice of the bassi-rilievi may be taken for what it may weigh against the main question. As regards the feeling of the Duke of Wellington, which all will respect, against the removal of the monument, His Grace would probably hesitate to urge such objections in opposition to the united verdict of the Royal Academy, the well-nigh unanimous voice of the art world, and expression of opinion in the House of Commons.

In reference to the suggestion in further compromise—viz., that matters might be somewhat mended if Wren's screen were moved out of the way—it is sufficient to bear in mind that a further instalment of "handsome abuse" would inevitably follow any such step. The screen in question is beautiful in itself; it is an integral part of Wren's work, and is companion to another *vis-à-vis* on the opposite side of the nave. Its removal, by which the lighting of Stevens's work would gain nothing, would not for a moment be tolerated by that large and growing section of the public which, while admiring the splendid genius of Stevens, knows also how to revere everything connected with the master-work of Wren.

### THE CALCUTTA EXHIBITION.

THE Executive Committee of the Calcutta Exhibition has issued a report of the proceedings at its last sitting. Mr. Joubert, the promoter of the scheme, asserts his belief that the exhibition will rank first in the list of similar undertakings in the East. Up to June 22, 104,450 square feet of space had been taken up. The period for receiving applications for space closes on August 15. Great Britain and her colonies occupy about three-fourths of the whole. Elaborate precautions are being taken for the security of the goods in the exhibition, and the question of their safe custody in transit is engaging the attention of the committee. A show of live stock, including exhibits from Australia, and from all parts of India, is to be added to the other attractions. The question of accommodation for visitors is (a correspondent says) a very difficult one, and will exercise the utmost energies of the committee. Houses are already being let at fancy prices, and the hotels are hardly sufficient for the ordinary winter incursion of strangers. There is some talk of forming a standing camp.

The Foundation-stone of a new hospital on the circular plan was laid last week in Greenwich, by the Earl of Dartmouth. Messrs. Young & Hall are the architects.

### NATIONAL PORTRAIT GALLERY FOR SCOTLAND.

ON the occasion of the banquet in February last of the Royal Scottish Academy, it may be remembered, says the *Scotsman*, that Mr. Maxtone Graham of Coltoquhey, in proposing the toast of "The Board of Manufactures," made the gratifying announcement that "a gentleman of great public spirit and patriotism had offered the sum of 10,000*l.* for founding a National Portrait Gallery in connection with, and under the management of, the Board of Manufactures, provided a similar sum was forthcoming from any other source." In approaching the consideration of the question how advantage might be taken of this handsome offer, the president of the Royal Scottish Academy and the other gentlemen who interested themselves in the realisation of it encountered difficulties, not so much in the way of meeting the monetary condition attached to the proposed gift by the generous donor, as in regard to the providing of a suitable building for the purposes of such a gallery as that contemplated. As the result, however, of negotiations which have been pending for some time, the Government have, we understand, not only indicated their intention of asking the necessary vote of 10,000*l.*, but have under consideration a scheme which has in view the transference of the Antiquarian Museum collection to the Museum of Science and Art, and the establishment of the National Portrait Gallery in the building thus proposed to be set free for the purpose. It is not, of course, intended to combine the two museums, and, while under the same roof, the direction of each will remain as at present. The Antiquarian Museum has long been hampered for accommodation, but as it is proposed to set apart in the Museum of Science and Art, shortly to be extended by a grant from the Government, two large rooms for the collection, Mr. Anderson, the curator, will be enabled to arrange it to greater advantage. The Antiquarian Society will, it may be added, change its place of meeting with the museum, and continue its career under the auspices of old associations.

### CRESSWELL AND SEIGHFORD CHURCHES, STAFFORDSHIRE.

THE members of the North Staffordshire Archaeological Society lately visited Cresswell and Seighford, when papers on the ruins were read by Mr. Charles Lynam.

At Cresswell, he said, the ruins consist of the east and north walls of chancel. Recent excavations have laid bare the outline of the little church in its entirety. It had only a nave and chancel of equal width and in continuous lines. The internal width is 18 feet; the length of chancel 20 feet; that of nave 30 feet. The thickness of the north wall is 2 feet 5 inches, and that of the east wall 2 feet 10 inches. The two fragments of walls are of two different dates. That to the north is of the Lancet period, and no doubt was erected with the rest of the church about the year 1200, or between that and 1225. This wall is pierced by two lancet windows, very small in dimensions, and having a square lintel inside spanning the splayed jambs. The lights are only 7½ inches wide, and 3 feet 4 inches in total height. They have the usual splay and square rebate externally, and a broad splay inside. The mortices for the stay bars to glass are just discernible, but the grooves for the glass can scarcely be traced. The precise junction of the flank walls with the rebuilding of the eastern wall with its abuttings are clearly marked, as the rebuilding was not substantially done, and the consequence has been that a serious settlement has taken place precisely at the line of junction.

The difference in the character of the work in the east wall from the other part is markedly clear. Its close-jointed masonry, angle buttresses of large projection, profile of string and base moulds, and its wide window opening, probably of four lights, all contrast with the broad-jointed masonry, broad and shallow buttresses placed square on the angles of the building, the simple splay to the base moulding, and the narrow slits of the windows of the original work. Much of the old masonry was reused in the rebuilding of the east wall, which has led to sundry anomalies in the work, but it was no doubt done at the end of the fifteenth century, whilst the whole church was destroyed, as proved by Mr. Whitby, very early in the succeeding century. Mr. Whitby has ascertained that a number of stones from the ruins were taken to a neighbouring weir on the river for the purpose of paving the waterway. This is still paved with stones, and if the church should at any time be rebuilt, the place whence the former stones of this sanctuary may be had will doubtless be borne in mind. There is another object of interest within a stone's throw of these ruins which may attract those learned in earthworks, and that is the long mound against the river, which certainly appears to be of artificial construction.

In describing Seighford church Mr. Lynam said: Seighford church at present consists of a chancel, nave, western tower, and north aisle. This latter is known as the Bowyer aisle, and out of it has been taken a vestry at the west end, to which there is an



outer doorway. The only general entrance to the church is in the west wall of tower. A priest's doorway to the south of chancel has been built up. Viewing the church from the main entrance to the churchyard at the south-west, one would at first sight be inclined to turn on one's heel and "move on," for from this point of view the principal objects to be seen are a Georgian tower and nave of brick, having perhaps a slight claim to some merit of dimensions and substantiality, but, architecturally, utterly depraved. Proceeding round the church from west to north, the Bowyer aisle and the east and west walls of chancel present historical details, which, to the careful observer, are of extreme interest, for in them are features of varying dates from Norman to Reformation times. On entering the church the north arcade of the nave, with the chancel arch, at once strikes the eye, and these parts are at the present time perhaps the most interesting portions of the building. First, it is seen at once that the work is Early Norman, and dates soon after the year 1100. Its massiveness, simplicity, and peculiarities of treatment of detail make this clear. Next, the variation in the plan and in the size of the pier of the eastern bay of the nave is remarkable. As a pier of a simple arcade it would be an anomaly; and looking at it carefully, and at its immediate surroundings, one is led to the conclusion that originally, in Norman times, the church was cruciform in plan, and that this pier received the cross arch east of the nave and that of the north transept, as well as the eastern arch of the aisle arcade. An examination of the external masonry of the north aisle fully confirms this view. It is marked by a distinct change in its character at this part. But this notion would, according to the present appearance of the nave from the church, involve the unlikely arrangement of a nave of only two bays in length. Go into the walled-off vestry, and another bay with its western respond pier is visible; so that it may be confidently accepted that the original church of Seighford was of Norman date and was cruciform in plan, and had a nave of three bays in length. The diameter of the nave shafts is 2 feet 6 inches, and their height 5 feet 6 inches, inclusive of base and capital, so that the shafts are only slightly more than two diameters in height; the bases and capitals are of early type. The chancel arch is the most ornamental feature in the Norman remains. Its nook shaft, elaborated mouldings of arch, and carved hood render it most effective in design. On two lead spout heads outside, one at the west and the other at the east end, is figured the date 1748, and the initials P. O. and I. B., C. W., which latter stands for churchwardens. At this date great alterations were made in the church. The tower was probably built at this time, the south side of nave was rebuilt, the whole of the roofs were probably reconstructed, and the pewing was put in. In short, the church was at that date what is now called generally restored. Though we cannot admire the taste with which these alterations were made, we must give credit to the spirit which animated their exertions, and, strange as it may seem, these brick buildings are the earliest efforts in the Gothic revival, for before the end of the reign of the Georges we find it developed to the extent exhibited in Stoke and other town churches in the Potteries. From the date of these buildings a single decade brought us to the time when Gothic architecture became predominant in church work, for since 1840 perhaps not one single-Classical church has been built; but another change is now spreading, and it is not unlikely the next new English cathedral may be of Classic taste. But to our more immediate subject. The next previous material alterations in the church were those made to the north or Bowyer aisle, when the four three-light windows and the four buttresses were put in. The alabaster tomb to William Bowyer and Mercy, his wife, now at the east end of this aisle, records the death of the former as in 1593, and it was about this time that this aisle was renovated. The original Norman church had, of course, a north aisle, as is manifest by the existence of the nave arcade; and there are fragments of the Norman walling, including the base mould still remaining at the west end of the north flank. Whether this aisle was continued east of the transept cannot now be asserted, but the remains of base moulding and string moulding at the north-eastern end of the chancel indicate that any aisle of chancel which there might have existed did not extend to the east gable as the Bowyer aisle now does. In the south wall of chancel is a two-light segmental arched window of about the date 1500, and in the same wall is a two-light window of somewhat earlier date, and another window of the same kind as this, just east of the priests' doorway, has been blocked up. In about the middle of the fourteenth century, in the north wall of chancel, two arches were placed, their outline being now discernible. These two arches have been taken out and one of hideous proportions—probably of brick—inserted. This was most likely done in the time of the great alteration in the middle of the last century. It remains now to consider what has to be said with regard to the chancel. That originally the chancel was coeval with the Norman church there can be little doubt, as the eastern arch of the crux still remains; but it would seem that about a hundred years after the original church was built the chancel was taken down and rebuilt, as the remaining walling, base moulds, buttresses, and string moulds are of about the middle of the thirteenth century.

Now we have reviewed the various structural features of this church as they appear in the building itself, it remains for us to

give brief attention to some of its minor points. Chief amongst these must be named the magnificent alabaster altar tomb (before referred to) of William Bowyer, Esq., and Mercy, his wife. On its top lie the recumbent effigies of the said William Bowyer and his wife, sculptured with rare art, faithfully giving all the richness of apparel and ornaments common to the date. At the west end are the armorial bearings of the two deceased. On the north side are the figures of four females, representing daughters of the deceased, and one son, and one figure swathed in cere clothes, perhaps signifying death in infancy. In a panel over the tomb in the north wall of the chancel are the armorial bearings of the deceased William Bowyer. No doubt originally this tomb was placed in the middle of this chapel, and this sculpture was at the foot of it. What remains on the other side cannot now be seen. This is one of many noble monuments to be found in this county, in themselves facts of history, but for the most part disregarded. May our visit to-day increase any interest that may be felt in the religious preservation of this precious relic. In this same chapel is a mural tablet of quaint device and inscription, to Edward Bowyer, Esq., and dated 1652. In the tower is an oak chest with the usual three locks upon it, and having quaint hinges and curiously-carved feet, bearing date 1620, and having the initials J. C. and W. C. (for wardens). At the west end is another mural tablet, bearing date 1628, recording the gift of 4/ out of lands by one Francis Chamberlin annually for ever. At the entrance two shelves are placed, bearing date 1767. On one is written, "For the use of the poor and stranger"; on the other, "Charity envieth not," so that the practice of making provision of books for strangers, sometimes followed nowadays, is not a novelty. The oak altar-table and pulpit, and cover to font and some pewing, are of seventeenth-century workmanship of good character. Some fragments of stained glass in the chancel, and some coloured decoration in the north aisle, are probably of the Bowyer tomb date. The glass is interesting. This inscription is plain, "Orate : p : bono : aia : uxoris eis." There is also the figure of St. Christopher, who, passing over waters, bears on his shoulder the infant Saviour; also a figure of the Blessed Virgin with the infant Christ. Her head is crowned, and his has a nimbus, with cross; also one female head crowned with long flowing hair; also two other female and one male head. All this glass is in brown line with yellow filling. The two fragments of glass in the east window have armorial bearings, and there are other small fragments in the window which has the figures on it. Every particular of this glass is very precious to all interested in archæological lore. In the north wall an early stone coffin lid has been inserted, and in a buttress in south wall is a tablet to Guli. Jorden, a former vicar, who died in 1738. In the chancel are several large marble monuments of the Eld family.

### THE CAVENDISH MEMORIAL.

THE design adopted by the committee for erecting the proposed monument to Lord Frederick Cavendish, on the South Nab, an eminence situated to the east of Bolton Abbey, is a massive square embattled tower, of Gothic character, affording a wide prospect of the surrounding hills and woods, the Valley of Desolation, the abbey ruins, and river Wharfe.

The monument stands on a rocky base, composed of the stone of which the hill is formed, so as to make it appear as natural an outgrowth from the hillside as possible; and it is approached by broad flights of stone steps, with a terrace and parapet at the base of the tower. The materials of which it is intended to construct the memorial tower will be obtained in the district, as far as practicable. The design selected was submitted by Mr. Thos. Worthington, F.R.I.B.A. (of the firm of Worthington & Elgood, architects, Manchester), under whose joint superintendence the work will be carried into execution.

### LONDON AND MIDDLESEX ARCHÆOLOGICAL SOCIETY.

THE annual excursion of this society was to Edgware, Whitchurch, Stanmore, &c., on the 7th inst. The Chandos Chapel at Whitchurch, with its decorative paintings by Laguerre and Verrio, were much admired, as well as the general appearance of the interior, which was explained by the rector, the Rev. J. B. Norman. Great Stanmore, with its ancient church of brick, in part remaining, was also visited, and described by the Rev. F. C. Jackson. The new church of Great Stanmore, close adjoining, was built some years ago, after the designs of Mr. H. Clutton. A short account of the manor of Edgware was given by Mr. S. W. Kershaw, F.S.A. (the hon. secretary), and Professor Hales and Mr. E. W. Brabrook commented on the ancient earthwork of Grimes Dyke, near Pinner. About one hundred persons, members and visitors, were present, and the meeting was one of the most successful and numerously attended for some years past,



## NOTES AND COMMENTS.

THE conditions of the new competition for the Science and Art Museum and Library Buildings in Dublin are now ready, and are to be had on application to the Commissioners of Public Works in Ireland. It is to be hoped that the various societies who possess an interest in the new buildings were consulted before the conditions were issued, for otherwise it may be assumed that opposition to the designs is inevitable. At the beginning of the year there had been no consultation, although the following resolution had been sent to the Science and Art Department: "The visitors of the Museum and trustees of the National Library desire to submit to the Government that no general plans for the new buildings should be adopted without previously obtaining the observations of the local bodies created expressly for the purpose of advising the Government in relation to the Library and Museum, as the decision on these plans will largely affect these institutions in respects which can best be judged of by local bodies." As no action was taken on the resolution by the Department, the trustees and visitors were compelled to express their regret that so much time was allowed to pass without any opportunity having been afforded them to offer observations on the scheme. This opposition between the Government authorities and the societies who will become the occupiers of the proposed buildings does not augur well for the new competition.

It is sometimes supposed that the science classes of the Science and Art Department are not attended by artisans. To ascertain how far it may be true Colonel DONNELLY, the director, instituted an analysis of some of the papers. Building construction and applied mechanics were selected as somewhat special or technical subjects, and, on the other hand, sound, light and heat, and magnetism and electricity as general subjects, in which there would probably be the smallest percentage of strictly artisan students. The result was as follows: In building construction 77 per cent. were operatives in the building trades, and among the remaining 23 per cent. were many clerks to builders, articled pupils to architects and surveyors; in applied mechanics 80 per cent. were operatives in the engineering trades; in sound, light and heat, 27 per cent. were artisans or the children of artisans; 18 per cent. tradesmen or the children of tradesmen; 19 per cent. clerks or the children of clerks; and 36 per cent. teachers, pupil teachers, and students at school. In magnetism and electricity the percentages in these several categories were respectively 30, 22, 18, and 30.

MR. ERNEST HART read a paper last week at Liverpool in which he advocated the necessity of provisions for the regulation of plumbers by local authorities. It was suggested that the names and addresses of all plumbers should be registered, and that no plumber should be allowed to carry on his trade until he had been registered and received a license from the local authority, the licenses to be renewable from year to year, and their continuance depending upon the licensee not having committed any gross infraction of the rules of the local authority during the year. The names of all licensed plumbers should be publicly advertised once a year by the local authority. The American system was also recommended for adoption, by which it is necessary that the plumbing and drainage of all buildings, public and private, should be executed in accordance with plans and specifications submitted to and previously approved by the local authority; that no drainage work should be allowed to be covered or concealed in any way until it had been examined and passed by the local surveyor; and that no new house should be allowed to be inhabited until the local surveyor's certificate was given. Moreover, a plan of the system of drainage must be appended to the lease or other documents for the letting of the house.

THE clerks in the surveyor's office in the city of York appear to possess rather enjoyable appointments, and many an architectural draughtsman must envy those young gentlemen. But play becomes expensive in course of time, and it is not surprising that the York clerks were therefore compelled to ask for higher pay. The Council, who have hitherto shown themselves to be easy-going masters, have not been liberal, as was anticipated, and, instead of an increase of salary, there is to be an investigation into the performances of the office. According to one councillor, who would seem to have been

behind the scenes, the clerks are so irregular that they have become "systematic in their irregularities." They take part in elections, they undertake work for themselves, they defy the surveyor, who is a model of every virtue, and have made his life intolerable. They are not afraid of excesses, and so little is thought of Council and ratepayers, that a young clerk does not hesitate to make use of one of the hundred-pound notes which are lying about the office. The councillor could not understand why there were no bonds in the office, meaning, of course, bonds of iron as well as of paper. It is a pity that there is a prospect of a change in so pleasant a place, but it is not impossible that, after all, the work in the surveyor's office may be much harder than the City Council suppose, and the investigation may be the means of obtaining better pay for the assistants.

DR. E. A. FREEMAN endeavoured to lay down the law of righteous restoration at the archaeological meeting at Lewes. Objects of the past, he said, divided themselves into two classes—those which could be used for present purposes, and those whose use had passed away. A church, a town hall, a house, and any object which was used in a church, a town hall, or a house, belonged both to the past and the present, and, as they could, they must reconcile the claims of the past and the present. On the other hand, there were other objects which belonged wholly to the past. No one would attempt to restore a cromlech, and he ventured to think that restoring a castle was as barbarous a thing as a human being could do. If anybody had seen the castle at Alnwick, in Northumberland, and compared it with Pevensey, they would soon see which was the better of the two. When it came to a town hall it was quite another thing. They must keep them for the present, and if they did not they were giving them up for the past. They must restore sometimes; but then came the question as to what limits and to what extent. Supposing in the middle of Westminster Abbey one pillar was giving away, and that this would allow the whole building to fall if the pillar was not rebuilt; he did not know if the great society who watched over their buildings would say, Let it fall, or, Don't put up a pillar like that again, but put up one unlike all the others. He thought architects would now say Let it fall, or prop it up with something which could not be taken for the old work; but he would ask if that was not going too far. Should they not make a pillar to match the others, and so not destroy the symmetry of the building?

ONE of the institutions of Dublin is the Botanic Gardens in Glasnevin, which now is controlled by the Science and Art Department. Botany is, however, a science which does not appear to find much favour from the authorities. The buildings containing the plants are falling into a ruinous condition. The palms are not to be surpassed by those at Kew, but the palm-house is in such a condition that any moment it may collapse. The roof-timbers are past repair, the platforms for visitors are dangerous, and the boilers leak. The museum is only a shed that is not watertight, the cases are of the worst possible description, and there is no provision for the preservation and mounting of specimens. For three years at least the officers have been vainly appealing to South Kensington for permission to undertake the requisite works. In a country like Ireland it is not wise to appear to give Government sanction to neglect and improvidence, as is now done at Glasnevin.

THE plan of lighting adopted in the life schools of the Ecole des Beaux-Arts, and which has been found to be successful, may not be generally known in English art schools. The room used for the study of the antique and living figure is furnished with an oil lamp of great power, having a reflector so placed as to throw the light fully and effectively upon the model, whilst over that portion of the room occupied by the students other oil lamps are arranged, having deep reflectors over and around them to throw light down and upon the works in progress. The seats of this room are continuous semicircles, and are arranged *en amphitheatre* to accommodate eighty students. The room set apart for students modelling in clay is capable of accommodating twenty-seven pupils. They work at posts with revolving tops fixed at equal distances apart, according to a semicircular arrangement, the studies being lighted by movable oil lamps and reflectors placed over and behind the students. The model is lighted in the same manner as in the antique room.









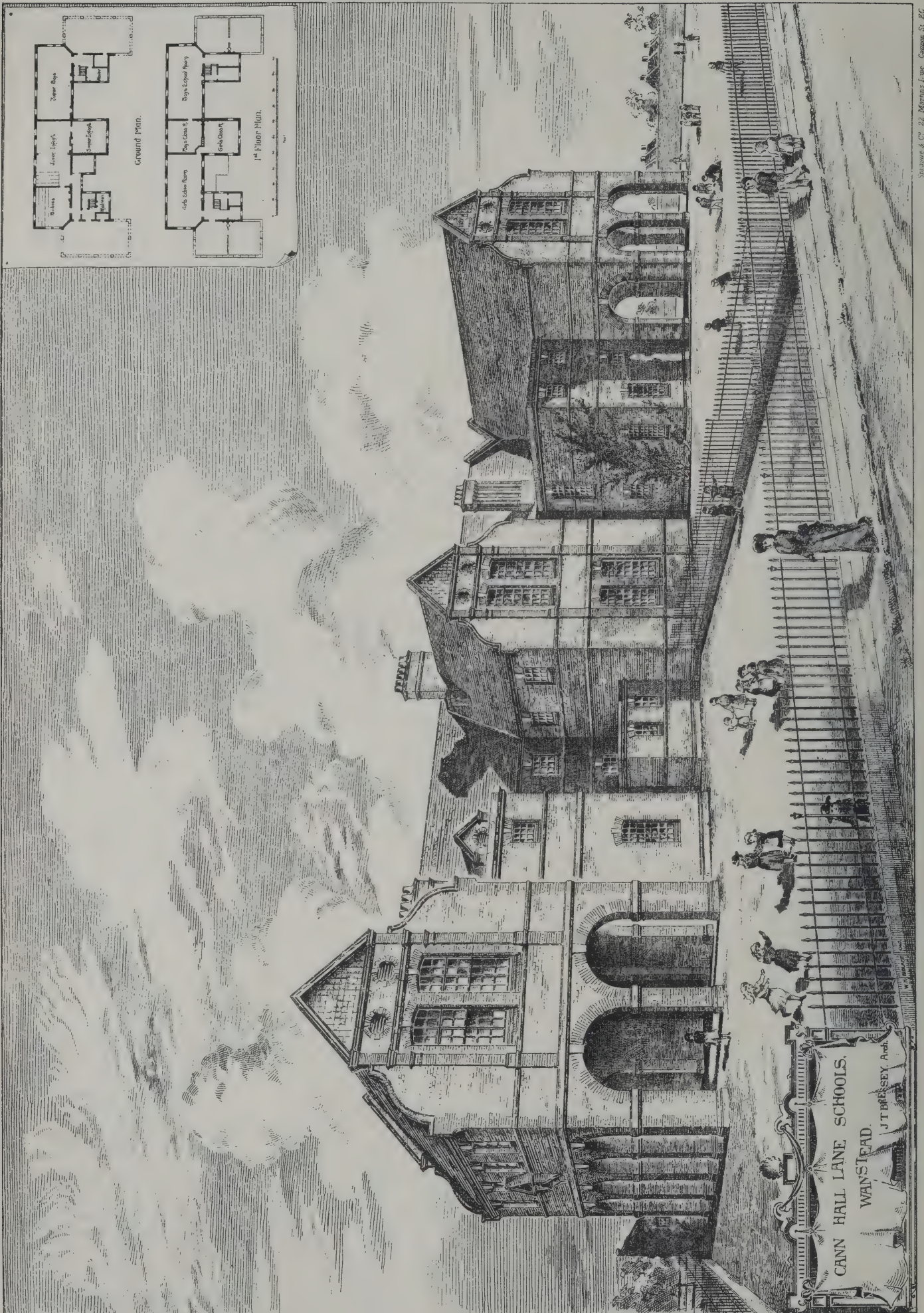
Sprague & Co. 22, Mark Lane, London E.C.

HOUSES AND SHOPS, FOLKESTONE ROAD, DOVER.  
MESSRS FRY & BROAD, ARCHITECTS.





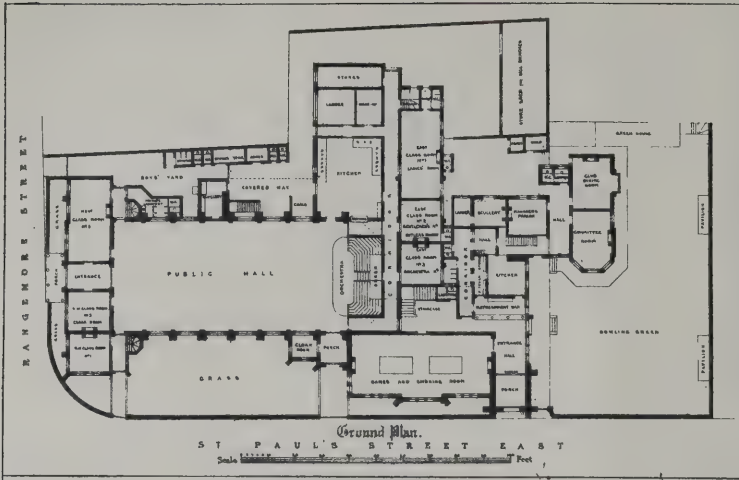












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ST PAUL'S INSTITU

REGINALD CH



Aug. 11<sup>th</sup> 1883.



BURTON-ON-TRENT.

H. L., ARCHITECT.









ALBERT ROAD BOARD SCHOOL, NOTTINGHAM A.H. Goodall Architect.







-Sketches of EVESHAM-



Almoner's House



The Old Barn



Almoner's House



House in Trumpel Lane



West Tower



The Whistling's Shed



The old Abbey almshouse



St. John's Street



- Entrance to Market Place -  
- T. Locke Worthington, Dec. -  
- May 1883 -



- Corner of the Market Place



The Avon



- Gateway to Churchyard -  
- Norman Arcade







## ILLUSTRATIONS.

ST. PAUL'S INSTITUTE, BURTON-ON-TRENT.

THIS building has been erected at the sole cost of Mr. MICHAEL THOMAS BASS. Originally intended to be worked under one management, the subsequent alteration of this arrangement and the handing over of a portion of the premises for the purposes of a Liberal Club involved considerable additions and alterations, which have been in progress since the opening up to the present time. The portion of the building retained for the general use of the public comprises the public hall, three class-rooms at the west end, three ditto at the east end, kitchen, larder, wash-up, stores, and cellars under, with cloak-rooms and back offices. The remainder of the premises is in the occupation of the Liberal Club. The public portion of the building is also used for a Sunday-school in connection with St. Paul's Church (erected about nine years ago, also at the cost of Mr. BASS), the whole area of the hall and class-rooms being occupied for this purpose. The large west class-room is also used as a parish room, and the upper class-rooms for a children's library and other purposes. A penny bank is also accommodated. Every convenience for public dinners is provided, apparatus for cooking and serving up the most *recherché* dinner for 350 to 400 guests being attached to the hall, in addition to which is provided electro-plate, cutlery, linen, glass, earthenware, and kitchen utensils. The other sundries provided are portable tables convertible as high or low, screens, extra platform and proscenium for dramatic performances, and crimson felt for corridors and class-rooms, &c., and a dancing cloth sufficiently large to cover the public hall when used for public balls, upon which occasions the club premises are taken into use, and the reading-room converted for the time being into a supper-room. The public hall roof is panelled throughout in pitch pine, and carried on ornamental rolled iron ribs of Gothic outline and decorated; the interior walls are finished in coloured brickwork, in patterns relieved by stone pilasters, with carved caps carrying the ribs of the roof, the lower part having a dado 6 feet high of glazed red tiles between stone plinth and string-course. A large traceried circular window is introduced at the west end, and the orchestra and a fine three-manual organ in case designed by the architect occupies the east end. The organ is worked by water-power. Ventilation is provided by longitudinal iron gratings in the roof connected with the *flèche* in the centre, and fresh air is admitted by ducts in each window-sill above the dado. Heating is effected by hot water-pipes in the floor and roof. The floors of all the rooms are laid with wood blocks on concrete. The walls throughout—excepting the large hall—are rendered in Portland cement and finished in KEENE'S cement, and in the club portion of the building are covered with Lincrusta-Walton and richly decorated. The refreshment-bar is an arcading of three pointed arches on polished granite shafts and carved caps, and is fitted up with buffet at back and every convenience. The staircase is of Wingerworth stone, with iron balusters, and is most elaborately decorated. It receives light from a lantern roof panelled in pitch pine, and carried on stone shafts. The library is furnished with about 3,000 volumes, and the games-rooms with two billiard-tables and chess-tables. The club premises are furnished, and the floors lined with linoleum (granite pattern, solid through) throughout at the cost of Mr. BASS, including also 6 inch speculum telescope, two microscopes, &c., &c., by Mr. BROWNING, of London. The tower contains a four-dial clock, striking Cambridge chimes, and hour-bell weighing 19 cwt. (the clock being manufactured by Mr. J. SMITH, of Derby, and the bells by Messrs. TAYLOR & SON, of Loughborough).

The general contract has been carried out by Messrs. LOWE & SONS, of Burton, assisted by Mr. DE VILLE as joiner, and Messrs. PICKERING BROS. as plumbers. The fireproof floors are by Messrs. DENNETT & INGLE. Mr. F. STEVENSON has carried out the whole of the decorations. The pattern-glazing was carried out by Mr. S. EVANS. The entire of the tiled floors and walls have been supplied and fixed by Messrs. MINTON, HOLLINS & CO. Mr. E. H. COGSWELL acted as clerk of the works during a portion of the progress of the work. The whole undertaking has been carried out under the personal supervision of Mr. REGINALD CHURCHILL, of Burton, architect.

Since the building was formally opened, extensive additions have also been made to the kitchen department. The kitchen itself has been doubled in size, and fitted up with a large range

of gas-stoves, and an oven capable of heating 600 dinner plates at one time. A large, well-ventilated larder has been added; also a wash-up place, store-room, and large cellar, into which the blowing apparatus of the organ has been removed, the wind being conveyed by an iron trunk through a subway under the floors, a distance of about 80 feet.

The total cost, including land, &c., will not be less than 40,000*l*.

CANN HALL LANE SCHOOLS, WANSTEAD, E.

THESE schools have been built for the Wanstead School Board, in accordance with the requirements of the Education Department, and from the designs of Mr. J. T. BRESSEY, architect, of 70 and 71 Bishopsgate Street, E.C. At present the centre part only of the main building is erected, and it is intended to build the wings when the need for further accommodation arises. The school in its present form will accommodate about 700 children. The rooms are lighted principally from the north. A few south windows are, however, introduced to render the ventilation more easy and to make the rooms more cheerful. The work was carried out by Messrs. D. C. JONES & CO., of Gloucester, under the personal direction of the architect, Mr. PHILIP PORTER, acting as clerk of the works. The amount of contract was 5,980*l*., and the works were carried out for that sum. In addition to the schools themselves, the contract comprised boundary walls, iron fencing, latrines, formation of playgrounds, and a caretaker's house.

ALFRETON ROAD BOARD SCHOOLS, NOTTINGHAM.

THESE schools have recently been built for the Nottingham School Board, at the junction of Alfreton Road and Bentinck Road, the two roads forming an obtuse angle, the apex of which has been utilised on plan for caretaker's residence of two storeys in the height (16 feet) of ground-floor of main building, with board-room for managers' meetings over. The girls' and infants' entrance is situated on main front, and the boys' entrance from back street. The accommodation provided (this being a "mixed" school, and largely used for half-timers) is for 480 "senior mixed," 210 "junior mixed," and 300 infants, being a total of 990 scholars. The schools have been planned to permit of the future erection of two large additional class-rooms. When this is done, 1,110 children will be provided for. The materials employed were local red brick, with Hollington stone dressings, Bangor slates, red ridge, &c. The contractors were Messrs. WHEATLEY & MAULE, of Nottingham; the architect was Mr. A. H. GOODALL, of Central Chambers, Nottingham; and the clerk of works, Mr. JOHN PRICE. The total cost, exclusive of land, was 8,632*l*. 12*s*. 4*d*.

HOUSES AND SHOPS, ST. MARTIN'S HILL, FOLKESTONE ROAD, DOVER.

THE fronts of the buildings shown in the illustration are of yellow stocks, with red brick angle shafts, bands, arches, &c. The weatherings and lintels over shop-fronts are of buff terra-cotta. The roofs are covered with red tiles, with plaster eaves and cornices, and the latter painted white. The red bricks, tiles, and terra-cotta have been supplied by Messrs. JOHNSON & CO., Keymer Junction Works, Burgess Hill, Sussex, and the quarry glazing by Messrs. GIBBS, HOWARD & CO., Fitzroy Square. Owing to the Military Hill at back the site is very cramped, and necessitated special planning. The works have been successfully completed by Messrs. AUSTEN & LEWIS, of Dover, from the designs of Messrs. FRY & BROAD, of Dover and Deal.

SKETCHES OF EVESHAM.

THE little country town of Evesham is situated in one of the most beautiful and luxuriant valleys in the south of England. Picturesque streets, abbey buildings, interesting churches and houses, historical associations, are all found there. The river winds round the town, forming a tract of land shaped like a horse-shoe, on which, at an early date, a monastery was established. It was in A.D. 709 that EGWIN, third Bishop of Worcester, founded an abbey. In the entrance gateway to the churchyard, and in other parts of the town, are found remains of Norman work attributed to WALTER the Monk, abbot in the reign of WILLIAM I. The remains of the old abbey are but scanty. The north wall, the richly-sculptured archway over the entrance to the old chapter-house, and



the almonry and kitchen are the most interesting. Most of the church work still remaining was, however, executed in the sixteenth century by CLEMENT LICHFIELD. To him is due the magnificent bell-tower, also the greater portion of the churches of St. Lawrence and All Saints. This great architect and monk ruled from 1513 to 1539; in the latter year the abbey was dismantled. The Church of St. Lawrence was dedicated in 1295; very slight traces of the original foundation are now visible. The east end is a fine specimen of Perpendicular work, and the double range of panels below the window on the outside, with rich and delicate angle buttresses, are particularly good. LICHFIELD's chapel, open to the church by a large panelled arch, has very rich fan tracery vaulting, a fine pendant, and very good windows. The somewhat patched Church of All Saints contains another chapel by LICHFIELD, of similar design to that in St. Lawrence. The entrance porch is an interesting example of late Perpendicular work.

But it is for its stately and finely-proportioned bell-tower that Evesham is celebrated, and from it Sir CHARLES BARRY derived inspiration for the tower of the Houses of Parliament. It is 117 feet high and 22 feet square at the base. It is proportioned into three parts, and is richly panelled from top to bottom on the two principal fronts. At each angle are two buttresses, divided into five stages above the base course, each stage diminishing in height. There is a fine ogee archway, above which is a six-light traceried window, both having a beautiful label and finial. The top stage, on the main fronts, has two double-light belfry windows. There are richly ornamented angle and central pinnacles, with an open panelled parapet. The excellent proportions and situation, accompanied by good detail and pleasing colour, make this tower indeed a grand study for the thoughtful student.

### THE ROYAL ARCHÆOLOGICAL INSTITUTE.

THE annual meeting of the Royal Archæological Institute commenced at Lewes on Tuesday in last week. The president of the meeting was the Earl of Chichester, who delivered an address, in the course of which it was said that the chief use of archæology consists in the illustrations which it often affords to regular history, which is at the best but an imperfect record of the past. His lordship referred to the discovery of ancient remains in the course of the construction of the line through Southover. When the London and Brighton Company began their useful but destructive works they invaded the site of the venerable Cluniac Priory of Southover. A more barbarous invasion under Henry VIII. and Lord Cromwell had completely devastated the beautiful church and other buildings of the priory. The second invaders were, however, more pitiful, for when excavating through the site of the church they came upon the altar steps and the church floor, and found two small leaden boxes, which were proved to contain the remains of the founders, William de Warrenne and Gundreda, the Conqueror's daughter. These precious relics were, by the railway authorities, immediately placed in the custody of Lord Chichester, and his lordship had the satisfaction, with the aid of archæological friends, of being enabled to erect a small chapelry in Southover Church, and to place in a plain but suitable tomb the illustrious bones, which, it is to be hoped, will now remain undisturbed by any future Cromwell or railway excavators.

The first building visited was Lewes Castle, which was described by Mr. Somers Clarke. The barbican, he said, had been more recently built than the castle. The keep was, he said, in some respects one of the most curious in England. There was not so much left of it as people could wish, but what there was threw a great deal of light on the style of structure common in that day. It was usual to throw up a mound or take advantage of a natural one. Round the mound was a mote, and the ditch was the parent of the mound. There were sometimes one and sometimes two keeps; where there was one, it was sometimes built in the centre, and sometimes at the ridge of the mound, as in this case. The enclosure began from the outside ditch, and generally included about a third of the mound. Before the time of the Conquest masonry was little used for purposes of defence. Those mounds which were artificial were, of course, not fit for a long time to support a building of stone and mortar. As far as he knew, there was only one of these old military buildings in England in which masonry appeared to have been introduced before the Norman Conquest (Corfe Castle). Arundel Castle was spoken of in Domesday as existing before the time of the Conquest, but he had failed to find any traces of it; if there were any they must be in the vaults not usually shown. When the Conqueror came over he left very few masonry castles behind him, and he found none here. Most probably timber was used for defensive purposes. The

Tower of London, although standing on the old Roman walls, was a Norman building, having been erected by the Conqueror. The whole of the policy of William was to put new men into the old sites, and leave them to fortify themselves; each baron seemed to have been left to build what castles he could, and as the mounds were strong, they were generally content with the fortifications which existed; the new fortifications were built elsewhere. The shell keeps were for the most part late Norman rather than early, but this at Lewes was early Norman. Here, too, nature had provided two mounds, this and the Brack Mount. Undoubtedly this was the keep, but it was clear the Normans could not leave the Brack Mount undefended, or the enemy would at once have seized it, and well it was for the fortification that so strong a man as de Warrenne came there, as he had a sufficient garrison to occupy both. But there were not two keeps; this was the keep, and the other erection on the Brack Mount was subordinate to it. It was a curious thing that when de Warrenne came over here he must have been perfectly familiar with the fortifications he saw. The speaker having remarked upon the fact that at Guildford the Castle keep was built partly on the plain and partly on the mound, said the cases in which Norman square keeps were placed upon the mounds were exceedingly rare. Mr. Clarke next pointed out that recent excavations showed that four side towers were additions after the original erection, the walls not being in any way interlocked, and further said that these excavations had also thrown some light in a manner on the keep itself, and prevented him building up a theory which would have been destroyed by facts. Generally archæologists were careful in forming theories to do so where facts could not be brought in proof against them, but in this case no doubt the erections to which he had referred, and which had made him quite ready to set up a theory, were the work of the late Mr. Kempe.

An elaborate paper on "The Battle of Lewes" was afterwards read at the Castle Banks by the Rev. W. R. W. Stephens. At the evening meeting Dr. E. A. Freeman delivered an address, as president of the Historical Section, on the history of Sussex.

On Wednesday Pevensey, Rye, and Winchelsea were visited. Dr. Freeman described Pevensey Castle. Unlike the castles of Bath and Chester, it had, he said, never been restored. He had no doubt that if excavated many precious things would be found, just as was the case at Silchester. So late as the reign of Stephen the sea came up to the walls of the fortress. Dr. Freeman pointed out that the most ancient part of the ruins, the outer walls, were of the common type of Roman wall, composed of flint, with bonding-courses of brick—a kind of wall seen everywhere except in Rome.

Mr. J. T. Micklethwaite described Pevensey Church. It was, he said, a question whether the building was really what it appeared to be, or whether the work was of modern insertion. Everything he had seen appeared to be modern; but if it were old, the building had grown from an old cross church. The church was entirely rebuilt during the thirteenth century, and it appeared that the work was carried out at different times, for they began with the chancel, and built it longer in comparison with the size of the body of the church than they would have done had the whole of the work been in hand at once. The tower was in the middle of the church instead of at the west end, and this plan was seldom adopted, as it was very inconvenient. The chancel was much narrower than the nave. In the body of the church were two little niches for figures, which people in the fifteenth century were very fond of putting up for the reception of votive offerings.

Westham Church was next visited. The Rev. H. Hopley said it was a grand old church, which exhibited different stages of architecture, some portions of it being undoubtedly very early Norman, probably contemporary with the castle. Some of the work was Early English, of which the arch leading to the west tower was a fine example. The roof was supported on double corbels, which was unusual. The chancel was of the time of Henry V. The stained glass in it had apparently been taken from other parts of the church.

Ypres Tower, at Rye, now used as a gaol and police-station, was described by Mr. Vidler. It was built, he said, by William of Ypres, who was created Earl of Kent by King Stephen. Ypres Tower is a quadrangular building, with a round tower at each corner, each tower being about 25 feet in exterior circumference, and 15 feet in the interior. There are two rooms in the building, one on the ground floor and one above, each 15 feet square. There is a door at every corner of each room communicating with one of the towers. There are stairs only in the north-east tower, and these do not reach to the top. In the north-east and north-west towers are severally four lancet windows, two up pretty high, the other two lower. In the south-east and south-west ones are five windows—three towards the top and two below; two old windows in south face between the towers, and one in the west. The walls are four feet thick, and the towers about 40 feet high. In 1837 a new building was added on the south-east side of the tower, for the purpose of enlarging the gaol.

The parish church of Rye was described by Mr. Somers Clarke. It is cruciform on plan: the building shows very distinctly how it has grown from a small church to its present very considerable dimensions. The centre tower was no doubt originally Norman, and it still retained within it Norman work, but the arches in it



have all been enlarged; those leading into the transepts are of fifteenth-century work, those into the nave are Transitional. In the north and south transepts there are traces of late Norman and Transitional work on the western walls. The external wall of the south transept shows very distinctly some of the Transitional or late Norman work. The nave is a fine example of Transitional work in its arcades. It is somewhat curious that although most of the columns are round, one on each side is octagonal. The aisles were evidently enlarged late in the fourteenth or early in the fifteenth century. The west window is an insertion of the late fourteenth-century date. A piscina exists in the north wall of the north aisle, indicating that a chapel must have stood screened off in this position.

Winchelsea was the next place in the programme. Mr. Micklethwaite described the church as unique. In these old commercial towns they usually found a small church had been built, and this had developed into a large one. Winchelsea was one of the few places in which a church had sprung fresh out of the ground, or had begun to spring, for this was never finished. When the place was prosperous they began to build an ideal parish church, and were not hampered with old Roman buildings, as in most places. However, misfortune overtook the town, and it was never finished. The chapel to the right of the main entrance had doubtless been the seat of some important guild, and on the other side of the church were effigies brought from the old church—the church at Old Winchelsea—with canopies erected over them. These effigies were considerably older than the church itself. The style of the church was Decorated, and he did not think the roof had been intended to be the permanent one. The church had remained a fragment, and he hoped it would continue to do so, and that no one would take the idea into his head to build a nave and transept. The ruins of the Friars' Church were described by Mr. Freeman. In the evening Mr. Micklethwaite delivered an address at Lewes, and a paper on "The Architectural History of the Cluniac Priory of St. Pancras at Lewes" was read by Mr. W. H. St. John Hope.

Thursday was an important day, for Hastings and Battle were visited, under the direction of Dr. Freeman, who read passages from his "History of the Norman Conquest." A *conversazione* was held in the evening, at which a paper was read by Mr. R. S. Ferguson on "The Dignity of a Mayor." Having described municipal insignia, he said that as regards robes he could give no information, and lay down no rules. He was one of the few mayors who possessed no robe, and he rather congratulated himself thereon. He was utterly unprepared for the gorgeous spectacle presented by his brother mayors at the Mansion House in 1882. Every variety of material, of colour, and of pattern that the wildest imagination of the tailor could devise was to be seen.

On Friday the annual business meeting was held, and it was resolved that the next meeting should be in Newcastle. An address was delivered by Major-General Pitt Rivers on the excavations at Cissbury Camp and Mount Caburn Camp, which were supposed to have been British fortresses. In the afternoon, under his direction, Mount Caburn was visited.

The first place visited on Saturday was New Shoreham. Dr. Freeman in describing the church, said that the true way if one wished to understand a structure was to look at the outside, and then to go in and examine it more in detail. He had been advocating this course for many years, but mankind was too strong for him, and people would still go on looking at the inside of every church or building they came to. Almost everyone would say the remains of a very fine conventional or collegiate church of the second order were here. Inside and out there was every sign of there having been upon the spot a minster. It was simply a parish church, one, he believed, of a type absolutely unique in England, with the exception, perhaps, of the Church of St. Mary Redcliffe, at Bristol, which in some respects was like it.

Mr. Micklethwaite afterwards described the spire of Compting Church, and Mr. Somers Clarke the Church of St. Mary, at Broadwater. Then the party journeyed to Arundel, where the castle was thrown open to the members.

On Sunday a sermon was preached in All Saints Church by the Archdeacon of Lewes. Chichester Cathedral was visited on Monday, and was described by Mr. Gordon M. Hills.

## THE PRINT ROOM, BRITISH MUSEUM.

THE contemplated appointment of Mr. Sidney Colvin to the keepership of the Department of Prints and Drawings in the British Museum is now completed. The *Times* says that circumstances rendered a change in the administration of the department almost indispensable. The method of dealing with the rough materials for a general catalogue of the collections had to be carefully considered, and the direction and execution of the work to be minutely superintended. The approaching transfer of the collections to a new set of rooms had to be prepared for, and it was seen that it must be followed by an increase of the staff, requiring careful selection of candidates and general reorganisation of the department. What was urgently called for is obtained by the new appointment. Mr. Colvin's scholarship is well known,

and he may be safely trusted with the task of both planning and revising the necessary catalogue or catalogues. His capacity for administration has been tried and proved in his direction of the Fitzwilliam Museum at Cambridge. Under his government the Department of Prints and Drawings may be expected to undergo a thorough course of reformation in every respect and with the best results.

## SAN TOMA, VENICE.

MR. HENRY WILLIS has described his success in rescuing a rare and precious specimen of fifteenth-century art from the spoiler. He says: Readers who have explored the more out-of-the-way nooks and corners of Venice will remember the little Piazza San Toma. It lies almost under the shadow of the Frari. At one end stands the church of San Toma; opposite to it is a fifteenth-century building, formerly the guild-house of the shoemakers, now a furniture warehouse. The sides of the piazza show little of architectural interest, further than here and there a picturesque window, or an occasional piece of stone carving. The real point of attraction in the piazza is the door of the guild-house, with the beautiful bas-relief that surmounts it. A glance shows the student of sculpture that it is a fine example of Lombardi work, possibly by the head of the school. It is set in a decorative border, and is in very low relief; the traces of colour have settled down into a prevailing warm tone, throwing a haziness and dream-like character over the composition, entirely in harmony with its old-world subject and sentiment. The figures represent St. Mark curing a shoemaker who has wounded his hand with his awl. The shoemaker is dressed in turban and Turkish costume; he is seated cross-legged on the ground, and is surrounded by the implements of his craft. The saint, a noble and dignified form, stands before him; he holds the wounded member in his right hand, his left being raised in benediction. Few modern sculptors would elaborate the background of a bas-relief to the same extent as in this slab, yet the towers and palaces now in detract from the presentation of the figures. I believe the legend runs that the shoemaker cured by St. Mark embraced Christianity, attained the honour of sainthood, and that his bones lie in the church on the opposite side of the piazza. Those unacquainted with the bas-relief, but knowing the Scuola di San Marco adjoining the church of SS. Giovanni e Paolo, will recall to mind a similar subject by Lombardi on the façade of the Scuola. Both are of the same date, and show affinities of design and treatment; and if the slab of the guild-house is not from the hand of Lombardi himself, it may well have come from his workshop.

Happening during a recent visit to Venice to pass through the piazza, I stayed for a minute in front of the doorway. Presently I was accosted by the furniture dealer, who, in the course of conversation, informed me that a "milord Inglese" had offered the landlord of the premises a large sum for the bas-relief, but that they had not yet come to terms. A day or so afterwards I was at the show-rooms of a dealer who had a piece of sculpture from a Venetian door-head on sale. He mentioned that he had his eye on a similar specimen of *quattrocento* work, and which he hoped to secure. Describing the slab, I at once recognised the masterpiece of San Toma. Having arranged to leave Venice on the following day I could only lay the case before some Venetian gentlemen, who have been earnest in opposing the spoliation, as well as the so-called restoration, of their native city. I ventured to suggest it might be possible to induce the municipality to purchase the bas-relief and to maintain it in its present position. I have lately received a letter from a Venetian friend stating that the owner of the property had been applied to, and when he was made aware of the artistic importance of his doorway and the interest it excited he very generously promised that it should remain intact as long as his tenure of the property lasted.

The letter went on to say that although this wanton destruction of architectural monuments, this tearing away of ornamentation that loses much of its beauty and value when dissociated from the spot for which it was designed, is done at the instigation of dealers—antiquarians they are called at Venice—yet that much of the blame attaches to those English collectors who with long purses in their pockets tempt the cupidity of the dealers, and often, indeed, incite them to the work of destruction. A picture, a majolica dish, or a bronze may be a legitimate object of purchase. If a church be demolished its carving and columns, its metal and wood work, naturally come into the market. But to strip a building of the decoration that has made it an object of regard for successive generations, that leaves an unsightly gap in what otherwise may be a pleasant street view, or possibly even one of the points of interest in a world-famous city, is an offence for which no excuse can be found.

It is not, however, English "milords" that are alone to blame in this matter. The British collector now finds a potent competitor in his American cousin. A similar case to that mentioned above came under my observation a couple of years ago at Antwerp. There, also, I happened to turn aside to glance at a well-known piece of sculpture crowning an antique doorway, which must have been familiar to many of your readers. It represented



a St. George fighting the dragon. Finding nothing but a blotch of rough plaster I made inquiries, and was told that a short time previously an American had persuaded the proprietor of the house to sell him the bas-relief. Instances like these are common enough to visitors to the older Continental cities. Fortunately, there are few collectors who would allow their mania to carry them to such lengths; but many will not refrain from buying objects of this nature from a dealer's showrooms. They might remember that when the demand stops then, too, will the wreckage cease. They should also remember that it is not only *quattrocento* bronzes, pictures, and majolica that are being fabricated to any amount at the present day in Italy.

Not the least gratifying circumstance connected with the saving of the San Toma sculpture is the fact that it was accomplished by Venetians. It gives promise that a public opinion is being created at Venice which will arrest this ruthless wrecking of house-fronts, as it will oppose the equally disastrous restoration of churches and palaces.

### THE IPSWICH CORN EXCHANGE.

A MEETING of the Ipswich Town Council was held on the 1st inst., when the following report from the Post Office and Corn Exchange Committee was read: Pursuant to the resolution of the council (in committee) on the 14th inst., your committee beg to report that they have had an interview with Mr. Binyon with reference to the extra works which had been ordered by him without the knowledge or sanction of your committee. The cost of these works was 1,710*l.* 10*s.*, and on this account Mr. Binyon was legally entitled to claim his commission, but in order to facilitate a settlement he has consented to forego such claim. Your committee recommend the council to sanction the payment to Mr. Binyon of 288*l.* 5*s.*, being the reduced amount agreed to be accepted by him in discharge of his account, as shown by the following statement:—

Total amount of contract and extra works	£	25,575	9	d.
Less cost of extras above named		1,710	10	0
	£	23,864	19	2
Commission of 5 per cent. upon 23,864 <i>l.</i> 19 <i>s.</i> 2 <i>d.</i>		1,193	5	0
Less seven payments made on account		905	0	0
Balance now payable	£	288	5	0

The report was adopted. One of the aldermen said that he had had the impression that they were not responsible for anything the architect ordered without their sanction; but they found the architect was independent, and had entire control. He hoped they would gain wisdom, and next time take care to have such provisions in the contract that they would not be again involved in such heavy cost.

### HOSPITAL CONSTRUCTION.

A PAPER was read by Captain Douglas Galton, C.B., F.R.S., upon hospital construction at the conference of the British Medical Association in Liverpool. He said: An hospital is not only a place for the reception of the sick poor; it has, so far as the community is concerned, a far more important function. It is the technical school in which the medical student must learn his profession, and it is an experimental workshop for the matured physician or surgeon. In order that the effect of the curative art may be studied under the most favourable circumstances and without disturbing causes, it becomes necessary that the hospital building in which the patients are lodged should be placed in the most favourable hygienic conditions, and furnished with the most complete curative appliances. Therefore, whether the hospital be looked upon as a place for the relief of misery or as a place for education, the same necessity prevails of making it as perfect as possible.

So far as the site is concerned, it would be preferable if it were possible to place the hospital on the outskirts of a town, where houses are widely distributed, for it is certain that the larger the open space round hospital buildings the better. On the other hand, it is necessary that hospitals should be within reach of the population for which they provide, because there are many cases which must materially suffer from conveyance to a distance, and they must, moreover, be accessible to the leading physicians and surgeons of the town, who necessarily reside in the centres of population. These centres of population consist often of districts closely built over, which are under questionable sanitary conditions, and where the circulation of air is often much impeded. It is, therefore, necessary to consider not only what is likely to be the effect of the surroundings upon the health of the hospital, but what will be the effect of the aggregation of disease in the hospital on the surrounding population. It is difficult to find examples of recently-erected town hospitals the air-space round which is restricted entirely to the ground on which they stand. I observe in the plan of the ground proposed to be

acquired for the new hospital in Liverpool that the area, extended to Pembroke Place, is about 200,000 square feet; and assuming that the hospital is to accommodate 250 beds, that would afford nearly 800 square feet per bed, which is much less than the space thought necessary in the newest Continental hospitals—e.g., at Antwerp, Berlin, and Dresden; but it must be observed that the space is supplemented, for the present at least, by the adjoining open ground occupied by the Medical School and University.

Mr. John Marshall, F.R.S., proposed in 1878 to construct hospital wards in the circular form, and this form has been adopted in the new hospital at Antwerp for 380 beds. The wards of this hospital depend upon the windows for ventilation, except in winter, when certain arrangements for the inflow of warm, and the removal of foul, air are provided. In cases of hospital construction practical experience is of more value than theoretical arguments. The Antwerp Hospital is not yet completed. When it shall have been in operation for a sufficient time, the experience derived from it will be watched with great interest. The whole efforts of the most advanced of the recent constructors of hospitals in Europe, and the constructors of the John Hopkins Hospital in America, have been directed to the separation of the several wards units which make up the hospital, and this separation is adverse to economical arrangements for mechanical ventilation. The circular form of ward appears to have had partly for its object to round the angles of the wards so as to prevent them from being places for the stagnation of the organic matter in the air. This object has been sought to be attained in another way by M. Tallet, in France. He adopts what he terms an "ogival" shape for the vertical cross section of the ward. This method of construction is very simple, free from angles, and fireproof, as the roof is free from wood; and the air space between the tiles on the roof keeps up an equable temperature in the wards. Sir John Pringle recorded many similar experiences.

The experience of the Crimean war led to the universal adoption of the pavilion system in this country. The Franco-German war in 1879 furnishes us with numerous examples of the curative effect of fresh air, and in many of the temporary hut hospitals which were organised by the Germans in the several towns adjacent to the frontier, to which the wounded from the field hospitals were removed, the sides were furnished with large flaps hung on hinges, so that they could be lifted up and left open in the daytime to admit of full circulation of air; and even when these were closed at night the ventilation was very plentiful. These experiences of war hospitals appear to have led the Germans to introduce single-storey pavilions for surgical cases in their new hospitals; and the French, who seem to be quite as much advanced in hospital construction, have adopted single-storey pavilions for the whole of their sick wards in their most approved new hospitals.

The question of the effect of the aggregation of the sick under one roof, or in one hospital, has also received much consideration in this country and in America during the last twenty years. The subject was brought into prominence in America during the American civil war; and in this country Sir James Simpson took up the question as an ardent advocate for diminishing the size of hospitals. The management and nursing have often more to do with the success of a case than the form of the ward; and whilst it may be true that a fair general idea of what are the difficulties of large hospitals may be obtained from results of the large number of cases, it is equally clear that we may produce bad results by neglect in a good cottage hospital, whilst, possibly, with eminent care, we may produce good results in a badly-constructed town hospital. As regards the facility of inspection, it is quite certain that a view of the beds in a distant cubicle could not be obtained through a series of glass partitions, and, admitting the desirability of isolating the patients, the complications of Mr. Greenway's method seem to present difficulties and to create corners for dirt.

The conclusion to which these various considerations would lead us is that for fever and small-pox hospitals temporary structures, to be renewed at frequent intervals, are desirable for the reception of the sick, the only permanent buildings being those for administrative purposes and for the use of the hospital attendants. It would also be desirable that every part of the ground attached to such hospitals should be paved or asphalted, except where covered with vegetation. It is questionable whether it would not be preferable for some, at least, of the surgical wards to be temporary structures so far as the walls and roof are concerned. But permanent structures would be necessary in all cases where uniformity of temperature must be maintained; and it seems probable that some modification of the Tallet system may be found to be the most convenient form of ward for the immediate future. Whatever may be the discoveries of science in respect to the origin and propagation of disease, the experience of the whole civilised world in the matter of hospital construction appears to point with unerring certainty to the fact that just as pure air is the best safeguard against disease, so does a free atmosphere produce the conditions most favourable to the cure of disease and to the healing of injuries. With simplicity in the form of hospital building we shall do well to combine shortness of duration, for if the aggregation of sick is in any degree injurious the hospital building must partake of that injury in an enhanced degree. The longer I study this question of hospital construction the more



firmly do I become convinced that hospitals should not be built for a long futurity.

Mr. H. Greenway, of Plymouth, has objected to Captain Galton's criticism of his system. He says: Captain Galton, when alluding to my plan, was in error in asserting "that a view of the beds in a distant cubicle could not be obtained through a series of glass partitions." If the partitions were made entirely of common glass, no doubt distant objects would appear distorted; but, in order to obviate this drawback, a portion of each partition (about 5 feet square) in the line of sight from the nurse's room would be stout plate-glass, and my experiments have proved such glass prevents obscurity and distortion. Captain Galton, whilst admitting the desirability of isolating certain patients, says "the complications of Mr. Greenway's method seem to present difficulties and to create corners for dirt." There are no complications in my mode of isolating beyond the multiplication of corridor doors, in order to give the power of converting into temporary ante-rooms any portions of a corridor outside the patients' rooms. These doors, however, I have stated are not essential to my plan, and they would be very seldom used. As regards the "corners for dirt," there would be no more in each compartment than in an ordinary ward; and, supposing there was such gross mismanagement as to allow dirt to remain about, it would not be absorbed either by the glass partitions or by the metal-covered floor.

Captain Galton, when explaining the model of a transverse section of my hospital, said: "A compartment is ventilated by opening its door and the window on the opposite side of the corridor, and then closing the corridor doors; also by a tube which opens through the floor underneath the bed." It was only on the 29th of last month I received a letter from him objecting to artificial ventilation for hospitals, and advocating natural ventilation by the windows. I replied that the tubular ventilation in my plan was natural, although it could be accelerated by artificial means, and that I could give window ventilation in the manner above described, "but this would never be required." I was therefore surprised to hear Captain Galton speak of this window ventilation across a subdivided corridor as my mode of supplying air, when I said (respecting ventilation by the two-inlet tubes), "I believe I have provided more than a sufficient amount of air, and under certain circumstances it would have to be lessened."

If Captain Galton, in addition to his knowledge of military engineering, had the experience of a medical practitioner, he would be careful not to expose a patient suffering from scarlet fever, measles, and certain other diseases to excessive ventilation, especially in such a climate as ours. The late Dr. A. P. Stewart, who presided over the Public Medicine Section in 1871, told me, after I had read my paper on hospital construction, that he had known many a patient die from lung or kidney affection produced by being exposed to excess of ventilation; and such would be the general verdict of the profession. All we require is that the patient shall be surrounded with pure air.

### THE VICTORIA HALL ACCIDENT.

THE report of Mr. Hugh Shield, Q.C., M.P., who attended on behalf of the Home Secretary the inquiries into the death of the one hundred and eighty-three children by the crush at the Victoria Hall, Sunderland, on June 16 last, has been presented to Parliament. Mr. Shield offers the following observations on the evidence: With regard to the question, How came the swing-door to be closed and bolted? I am unable to state with confidence any conclusion other than that which was expressed in the verdict of the jury—viz. that the evidence was not sufficient to determine it. Without intending to judge severely the evidence of the children, I think it would be unsafe to rely on the accuracy of their statements as to seeing Hesselstine put down the bolt. On the other hand, there are some proved facts and some probable inferences which appear to favour Hesselstine's story. The swing-door was, when Graham last saw it—less than an hour before the calamity—in a position from which it could easily be moved. If moved so far as the socket it was in the highest degree probable that the bolt would fall into the socket. There is another theory inconsistent with Hesselstine's story, and not exactly in accordance with the children's evidence, which has a considerable degree of probability to recommend it, viz., that Hesselstine, wishing to regulate the outflow of children in order the more easily to distribute the prizes, drew the door from the wall, and the bolt of its own accord fell into the socket. I concur in the recommendations of the jury that the swing-door should be removed. It was not in the hall as originally built, but was added in 1876, without consultation with the architect, Mr. George G. Hoskyns, who stated in evidence that he would not have sanctioned it. The objects for which the door was erected were: To shut off the gallery on occasions when it was not intended to be used, to obviate undue crushing on the stairs on entering, and to prevent draught. I conceive that these objects might be secured by other means, and that it is undesirable to retain a door which from its liability to escape observation could not be otherwise than a source of danger. I think no door which is so situated

as to be capable, whether through accident or mismanagement, of impeding the egress of a large number of people from a building, ought to be furnished with a bolt such as that which rendered the swing-door immovable on the occasion of this disaster. It was made of smith-forged iron, the strongest description of ironwork. The object for which a bolt upon a principal door of egress can be required might be attained by the employment of a bolt of a lighter description, which would yield to pressure in the event of a block. Mr. Hoskyns stated that all the bolts designed by him for the doors of the Victoria Hall were of this light description, although, it is to be observed, other doors besides the swing-door are at present furnished with heavy iron bolts. A suggestion well worthy of consideration was made by another architect, Mr. Frank Caws, that all such bolts ought to be spring bolts which would remain up except when kept down in the sockets. Although I am of opinion that no individual in connection with this disaster was guilty of such negligence as would support a criminal charge, I consider Mr. Fay and Mr. Coates censurable in a high degree for their recklessness in allowing so large a number of children to be brought together in the hall at very short notice to the hall-keeper, without having provided an adequate staff of assistants to control and protect the children, and without having taken pains to impress even the few assistants they had with any clear sense of responsibility. Of all the persons connected with the entertainment and the hall who were present on June 16, I feel bound to say that, judging from what they did and what they omitted to do before the disaster occurred, they appear to have thought of nothing in relation to the audience but the collection of the money. It is unnecessary for me to remark on the action of the schoolmasters and teachers, which was censured by the Vice-President of the Council in the House of Commons, in answer to a question addressed to him by Mr. W. James, M.P.

### LEGAL.

High Court of Justice.—Aug. 4.

(Before Mr. Justice WATKIN WILLIAMS.)

YOUNG & Co. v. BACON.

THE HOLBORN STATUE.

This was an action brought to recover the balance of account alleged by the plaintiffs, of the Eccleston Iron Works, Pimlico, to be due to them from the defendant, Mr. Charles Bacon, the sculptor. During and between the years 1871 and 1877 the plaintiffs executed certain works for the defendant, among others those in connection with the equestrian bronze statue of the late Prince Consort on Holborn Viaduct, and with the Candlish memorial at Sunderland. The substantial questions in the case were as to the terms upon which the plaintiffs had contracted to do the work for the defendant, and as to whether or not the charges made by them for extras were fair and reasonable. The amount paid to them by the defendant between 1871 and 1877 was 1,181*l.*, and they claimed a further 115*l.* from him. The defence was that not only was nothing due to them, but that, as a matter of fact, they had been overpaid to the extent of 200*l.*, repayment of which sum the defendant claimed by his counter-claim. By an error two sets of figures had been transposed in the particulars given by the plaintiffs, the mistake having originated in the entries in their ledger. The error consisted in the price, 500*l.*, of the work done by the plaintiffs on the figures at the base of the equestrian statue of the Prince Consort having been entered as the cost of the figure itself, which was, according to the contract, to be only 300*l.* Signor Raggi, the sculptor, was called by the plaintiffs to prove that the charges made by them for the extras were fair and reasonable. Mr. Bacon was the only witness called in support of his own case.

The jury found for the plaintiffs both on the claim and counter-claim after deliberating for only a few minutes in the box.

His Lordship gave judgment accordingly for the plaintiffs for 115*l.*, expressing his concurrence in the verdict.

### NEW BUILDINGS.

**The Gilstrap Free Library, Newark-upon-Trent.**—These buildings, which have been designed by, and erected under, the superintendence of Mr. Henman, A.R.I.B.A., of 38 Bennet's Hill, Birmingham, for Mr. William Gilstrap, of Farnham Park, Bury St. Edmunds, were formally opened on the 26th ult., and by him presented to his native town, the mayor and corporation attending in state, accompanied by a large number of the inhabitants. Mrs. Gilstrap performed the ceremony and presented to the mayor, for preservation among the muniments of the town, a very handsome key in silver parcel gilt, specially designed for the occasion by the architect. The head of the key bears on one side the arms of Newark, and on the reverse those of Gilstrap; the stem is octagonal, surrounded by a scroll, on which is engraved "Free Library, Newark-upon-Trent, built and endowed by William Gilstrap, Esq., opened July 26, 1883." After the building had been declared open for the free use of the public, and the deeds handed over to the chief magistrate, an address and the thanks of the



working men of the town were presented to Mr. Gilstrap. Then the company marched in procession to the town hall, where luncheon was provided by the mayor, and the donor received the thanks of all classes for his munificent gift. The buildings consist of the borrowers' hall, a general, a reference, and a ladies' reading-room, the library, and a librarian's private office, and are very generally admired for their completeness of arrangement and artistic treatment. The total cost to Mr. Gilstrap will amount to about 8,000*l*.

### CHURCH BUILDING AND RESTORATION.

**Allerston.**—The parish church of Allerston, near Pickering, has been reopened after having undergone restoration, which has been completed at a cost of about 1,000*l*. The work of restoration has been carried out under the direction of Mr. Ewan Christian.

**Blackburn.**—St. Stephen's Church, Tockholes, has been reopened. The roof and walls having fallen into a state of partial decay, and other portions of the building requiring repair, Mr. Bertwistle, architect, of Blackburn, made an examination of the church, and, acting on his report, it was determined about a year ago to rearrange the interior of the church, repair the outer walls and roof, substitute a new floor for the old wooden one (in which the presence of extensive dry rot had been detected), and to replace the old high-backed and very uncomfortable pews with more modern seats. These works have now been carried out, under the direction of Mr. Bertwistle, by Mr. Thomas Fawcett, contractor, of Blackburn. The church in its altered arrangement will seat 620 persons. It consists of a nave and north and south aisles. There are also three cross aisles, one at the extreme west of the building, a second leading from the principal entrance, and a third divides the body of the church from the new quasi chancel.

**Dearham.**—The parish church of Dearham has been reopened after restoration and enlargement. Mr. J. C. Ferguson, of Carlisle, is the architect. The following are the contractors for the works: Masonry, the late Mr. W. Marshall, of Maryport; joinery, Mr. W. Foster, Wigton; slating, Mr. T. Mandle, Maryport; glazing, Mr. Palmer (late Scott), Caldewgate, Carlisle; plastering, Mr. Ormerod, Carlisle. The total estimated cost of the work is 1,750*l*.

**Dovercourt.**—The foundation-stone of a new church has been laid. The first portion of the church will cost 1,600*l*. When fully completed the cost will amount to 3,500*l*. The church will consist of chancel, nave, aisles, and west tower and spire. The edifice throughout will be of red brick, except in the pillars and some of the windows. Mr. J. Edward Cutts, A.R.I.B.A., is the architect, and Mr. George Dobson, the builder.

**Ilkeston.**—The foundation-stone of a new church, dedicated to the Holy Trinity, has been laid. It will consist of a nave, 68 feet by 21 feet; north and south aisles, each 68 feet by 10 feet 6 inches; chancel, 34 feet by 21 feet; chancel aisle, 34 feet by 10 feet 6 inches; with vestry and organ chamber. The main entrances will be through a western doorway and a south porch. The height of the nave from floor to ridge of roof is nearly 50 feet. The church will provide, when complete, 512 sittings. The first section to be built is the nave, which will accommodate about 250. The style is Early English; the walls will be built of stone, and the roofs covered with red Staffordshire tiles. The architects are Messrs. Evans & Jolley, of Nottingham.

**Mull.**—A new free church has been opened at Salen, Mull. The building, the foundation-stone of which was laid about a twelvemonth since, has been erected from the plans and designs of Mr. Hay, architect, Edinburgh.

**Reddish Green.**—The new church of St. Elizabeth, which has been erected by Mr. W. H. Houldsworth, was opened on Saturday last. The building has been erected from the designs of Mr. Alfred Waterhouse, A.R.A.

**Teignmouth.**—A Congregational church, recently erected at Teignmouth, has been opened. The building is in shape somewhat cruciform. The north end has a traceried four-light window, which surmounts an open segmental arch leading to the two vestries. These are built partly inside and partly outside the body of the structure, and an apsidal chancel is thus secured which is utilised for the organ and choir-stalls. There are five bays, in two of which, on the street side, are twin windows, and in the transept-gables are high double windows with a wheel light over them. The south end of the church is semi-octagonal, with large clerestory windows, and contains a deep gallery. Mr. J. Sulman, of Furnival's Inn, E.C., is the architect, and the contractors were Messrs. E.C. Howell & Son, Bristol.

**Mr. Justice Watkin Williams** on Saturday testified to the successful arrangement of the New Law Courts in the Strand. "It is only fair to mention," he said, "that my experience of the management of the courts is that it is as perfect as possible; the ventilation has been so complete that the temperature of the courts has left nothing to be desired, and there has been a great improvement in their acoustic properties. I have, indeed, seen nothing like them anywhere else in England."

### GENERAL.

**Mr. Reid, R.S.A.**, has received a commission to paint a portrait of the Duke of Richmond and Gordon, for the gallery at Gordon Castle.

**The Ninth Annual Exhibition** of the Sheffield Society of Artists closed on Saturday last.

**Mr. Millais, R.A.**, has nearly completed his portrait of Mr. Henry Irving, which he will present to the Garrick Club.

**Mr. Alma Tadema** is to supply the frontispiece to *The English Magazine*, published by Messrs. Macmillan & Co., the first number of which is to appear in October, under the editorship of Mr. J. Comyns Carr.

**The Dalbeattie Fine Art and Loan Exhibition**, which has proved a great success, was closed on Saturday last after being open four weeks. A surplus of over 100*l*. will be devoted to the library of the Mechanics' Institute.

**The Chancel of St. John's Church, Weymouth**, has been embellished with the addition of a richly-carved reredos—in Caen stone and white alabaster—a new organ case, and elaborate mural and roof decoration, from the designs and under the superintendence of Mr. E. Francis Clarke, architect, of 7 Westminster Chambers, S.W.

**A New Clock**, the gift of the colonel and officers of the 1st Battalion of the Wiltshire Regiment, has just been fixed in the tower of Salisbury Cathedral. It has been presented as a memorial of the officers, non-commissioned officers, and men who died in India during the year 1868 and the present year.

**An Oak Pulpit** has been placed in the church of St. James, Wednesbury. It was designed by Messrs. Horton & Scott, of Birmingham, and constructed by Messrs. Jones & Willis.

**The Duke of Westminster** has given 1,000*l*. and a site of six acres of land towards the erection of a church at Caerfallwch, Northop, near Chester.

**The Salford Borough Council** have voted an honorarium of 100*l*. to the borough engineer, for extra services in connection with the preparation of plans for the Parliamentary committee.

**The Benchers of the Temple** have decided to have Nos. 3 and 4 Garden Court taken down and rebuilt. The tenants occupying the chambers have received notice to quit, and the work of demolition, it is intended, will begin about the end of the year.

**The Church of St. Michael-at-Coslany** is to be restored under the direction of Messrs. Oldham Chambers & Willins, architects, of Norwich. Amongst the works contemplated is the continuation of the beautiful flint tracery of the Thorp Chapel round the exterior of the chancel, together with the reinstatement of the original east window.

**The Northwich Town Hall** has for some time shown evidence of falling on account of the subsidences in this district. The front portion inclines towards the street about twenty inches out of the perpendicular, and the local board have condemned the building as positively unsafe, applying to the magistrates for an order to compel the owners to either pull it down or secure it. The bench made the order asked for.

**Mr. J. Hamilton**, the demonstrator in engineering at Mason's Science College, Birmingham, has been awarded the highest Whitworth Scholarship for this year, value 200*l*.

**A Contract** for paving the principal streets of Dumfries with granite has been obtained by Mr. Dobbie, of Leith.

**The Aberdeen Town Council** have adopted the report of the Committee promoting the City Improvement Extension Bill, which, *inter alia*, stated that the expenses connected with carrying through the measure amounted to 4,231*l*. Of that sum 500*l*. is to be paid to the Committee of Citizens who opposed the Bill in terms of the compromise agreed to.

**The Operative Plasterers** of Edinburgh are at present moving with a view to secure uniformity in the rate of wages paid by the employers throughout the city.

**The new Streets** made in the recent improvements at Hyde Park Corner are on land that was part of the Green Park, and consequently part of the parish of St. Martin-in-the-Fields. But being in effect extensions of Piccadilly and Grosvenor Place, they practically form part of streets situate in the parish of St. George, Hanover Square. In a Bill introduced by Mr. Shaw Lefevre it is provided that the Metropolitan Board of Works may direct that the new streets shall be wholly or partially under the management of the Board or the Vestry of St. Martin's or that of St. George's. The Board is also to direct in what manner the costs of the maintenance of the streets is to be defrayed, whether by contributions from all or any of these bodies or wholly by one of them.

**Ventilation of Public Buildings.**—Messrs. Robert Boyle & Son, 64 Holborn Viaduct, and Glasgow, have recently had their system of ventilation adopted for the following public buildings: New Art Galleries, Liverpool; New Art Gallery, Birmingham; Guildhall, Bristol; New Public Hall, Cardiff; General Post Office, Manchester; New Theatre and Concert Hall, Devonshire Park, Eastbourne; Boys' Home, Forest Hill; Children's Hospital, Brighton; new Workhouses, Wandsworth. They are also at present ventilating for Mr. Arthur W. Blomfield, F.R.I.B.A., St. Michael's Church, Paddington; St. John's Church, St. Leonards; and Emmanuel College Chapel, Cambridge.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, AUGUST 11, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

### COMPETITIONS OPEN.

BRISBANE.—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

### CONTRACTS OPEN.

ABERDEEN.—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

BOLTON-LE-SANDS.—Aug. 14.—For Additions, &c., to Croftlands. Mr. Stephen Shaw, Architect, Kendal.

BOWNESS.—Aug. 15.—For Building Two Dwelling Houses. Messrs. Steel & Tully, Rickergate, Carlisle.

CARMARTHEN.—Aug. 21.—For Alterations to St. David's Church. Messrs. Middleton & Son, Architects, Cheltenham.

CHATHAM.—For Erection of St. Paul's Schools. Mr. Robert Willey, Architect, Ludgate Chambers, 66 Ludgate Hill, E.C.

CHATTERIDGE.—Aug. 20.—For Building Water Tower. Mr. Alfred Culshaw, Rumford Court, Liverpool.

CLYDDU.—Aug. 28.—For Building Board School. Mr. E. Sidney Hartland, 7 Rutland Street, Swansea.

CRUICKBOTTOM.—For Building Weaving-shed. Messrs. Stott & Sons, Architects, 12 Clegg Street, Oldham.

DAGENHAM.—Aug. 29.—For Building Infant School. Mr. John Hudson, Architect, 80 Leman Street, White-chapel.

DARLINGTON.—Aug. 13.—For Building School-room and Class-rooms. Mr. F. W. Brooks, Architect, 40 High Row, Darlington.

DELPH.—Aug. 14.—For Building Goods Warehouse. Mr. S. B. Worthington, C.E., Victoria Station, Manchester.

DUBLIN.—Aug. 16.—For Building Fire Brigade Station. Mr. D. J. Freeman, 34 Dawson Street, Dublin.

DUNGANNON.—Aug. 15.—For Building Sunday School and Parochial Hall. Rev. Lewis Richards, Dungannon.

EASTWOOD.—Aug. 11.—For Building Mission Church. Mr. J. B. Bailey, Architect, North Street, Keighley.

ECCLESFIELD.—Aug. 11.—For Building Board Schools, &c., Wincobank. Messrs. Wilson & Masters, Architects, Hartshead Chambers, Sheffield.

FEATHERSTONE.—Sept. 1.—For Building Two Schools, School-house, &c. Mr. Frank W. Bradley, Solicitor, Castleford.

HUDDERSFIELD.—Aug. 14.—For Building Goods Warehouse. Mr. S. B. Worthington, C.E., Victoria Station, Manchester.

KILLYLEAGH.—Aug. 18.—For Additions to Manse. Mr. W. Batt, jun., 4 Wellington Place, Belfast.

MERTHYR VALE.—Aug. 13.—For Building Fifty-four Workmen's Houses. Mr. Walter Bell, Merthyr Vale.

NEWPORT.—Aug. 14.—For Rebuilding Premises. Mr. A. O. Watkins, Architect, 113 Dock Street, Newport, Mon.

NORTHAMPTON.—Aug. 24.—For Building Theatre and Opera House. Mr. C. Dorman, 78 Abingdon Street, Northampton.

PRESTON.—Sept. 1.—For Building the Harris Free Library and Museum. Mr. J. Hibbert, Architect, 149 Church Street, Avenham Street, Preston.

RIPLEY.—Aug. 20.—For Building School at Waingroves and a School at Hartshay. Mr. James Kent, Architect, St. James's Chambers, Derby.

THORNE.—Aug. 15.—For Building Town Hall. Messrs. Wilson & Masters, Architects, Doncaster.

WEST BROMWICH.—Aug. 20.—For Building Board Schools, Black Lake. Mr. E. Pincher, Architect, 292 High Street, West Bromwich.

### TENDERS.

#### AUDENSHAW.

For New Class-rooms for St. Stephen's Schools, Audenshaw. Mr. J. H. BURTON, Architect, Ashton-under-Lyne.

Moss, Audenshaw	£268 0 0
Pike, Hooley Hill	246 16 0
SMITH, Droylsden (accepted)	190 0 0

#### BARNET.

For Erection of Additional Building on Irrigation Farm, for the Storage of Grain, East Barnet.

Bint & Son, Little Berkhamstead	£185 0 0
Butcher, New Barnet	138 0 0
PRENTICE, New Barnet (accepted)	105 0 0

#### BAUMBER.

For Erection of Farm Buildings, Baumber, Lincolnshire. Mr. J. B. COBBY, Architect, Stamford.

Hunter & Son, Spilsby	£1,618 10 0
Miller, Minting	1,541 0 0
Walter & Hensman, Horncastle	1,506 0 0
Dunkley, East Vile	1,337 10 0
HOLMES, Wainfleet (accepted)	1,238 10 0

#### BRIGHTON.

For Extension of Business Premises, No. 70 Western Road, Brighton, for Mr. W. Hetherington. Mr. FREDERIC W. LEDGER, Architect, 3 Lombard Court, E.C.

Mills	£438 10 0
W. & J. GARRETT (accepted)	384 0 0

#### BRISTOL.

For Erection of Premises for Messrs. Edwards & Ringer, Redcliff Street, Bristol. Mr. H. CRISP and Mr. H. C. M. HIRST, Architects. Quantities supplied.

Walters & Son	£12,033 0 0
Belmont	11,968 0 0
Wilkins & Son	11,932 0 0
Brook & Bruce	11,450 0 0
Humphries	11,360 0 0
Crocker	11,005 0 0
Forse	11,000 0 0
Davis	10,945 0 0
Howell & Son	10,884 0 0
STEPHENS & BASTOW, Bristol and London (accepted)	10,873 12 6

### BIRMINGHAM.

For Sewering Newtown Row, Birmingham. HILTON (accepted) £1,338 0 0

For Construction of Storm-water Conduit from Hunter's Street to Stewart Street, Birmingham. LAW (accepted) £4,300 0 0

### CHATHAM.

For Drainage of Luton District, Chatham. Messrs. GORTO & BEASLEY, C.E.

W. & J. Botteril	£6,641 0 0
J. W. & J. Neave	5,989 0 0
Smith, Chelsea	5,770 0 0
Wilkes & Co.	5,595 0 0
Smith, Newcastle	5,542 0 0
Beadie Bros.	5,450 0 0
W. & T. Denne	5,379 0 0
Ford & Everett	5,225 0 0
Dickson	5,178 0 0
Nicholson	4,964 0 0
Thompson	4,875 0 0
TRUEMAN (accepted)	4,679 0 0

### DEVON.

For Building Works at Stoodleigh Court, Devon. Messrs. ERNEST GEORGE & PETO, Architects. Quantities supplied.

Simpson & Cary	£14,601 0 0
Manley	14,533 0 0
Trask	14,520 0 0
Lettebridge	14,242 0 0
Stephens & Bastow	12,725 0 0
Cawlin & Sons, Bristol	12,198 0 0
Estcourt, Gloucester	12,119 0 0
Peto Bros.	11,461 0 0
Luscomb & Son	10,619 0 0
Pethick	9,281 0 0

### DEVONPORT.

For Repairing the Plastering of the Exterior of the Guildhall Buildings, Devonport. Mr. JOHN F. BURNS, Borough Surveyor.

Denithorn	£50 15 0
Smith	41 12 0
HEALY (accepted)	39 5 0

### DUNSTABLE.

For Works in Making Carriage-way and Footpath, King Street, Dunstable.

Higgs & Son, Dunstable	£350 0 0
Mardell & Capper, St. Albans	340 10 6
Headey, Dunstable	332 18 0
ROBINSON, Dunstable (accepted)	329 0 0
White, Dunstable	316 0 0

### EARL SHILTON.

For Alterations at the Lord Nelson, Earl Shilton. Mr. F. UNDERHILL, Architect.

Norton, Stoney Stanton	£970 8 0
Maddocks, Burton-on-Trent	630 0 0
J. & W. HAROLD, Hinckley (accepted)	613 13 6

### FALKIRK.

For Alterations and Additions to Northern Public School, Falkirk. Messrs. A. & W. BLACK, Architects, Falkirk. Quantities by Messrs. Daniel Duff & Henderson, Glasgow.

#### Accepted Tenders.

Reid, Larbert, mason	£478 0 0
J. & A. Main, Falkirk, joiner	406 0 0
Draper, Falkirk, plumber	114 7 7
Millar, Falkirk, plasterer	54 0 0
Walker, Falkirk, slater	25 16 8
Total	£1,077 4 8

### FRIMLEY.

For the Erection of a House on the Wykeham Park Estate, Frimley, Surrey, for Mr. A. C. Pain.

Adkins, Surbiton	£2,500 0 0
Martin, Wells & Co., Aldershot	2,200 0 0
Haylock, Ior don	2,073 0 0
Kemp, Aldershot	1,810 0 0



## GOOLE.

For Enlargement, Re-pewing, Painting, &c., of Garthorpe Chapel.	
Jackson Bros., Goole . . . . .	£275 0 0
J. W. Jackson, Goole . . . . .	214 16 8
WATERLAND & GILLEARD, Garthorpe (accepted)	207 0 0

## HALIFAX.

For Private Improvement Works in Clay Street and Pitt Street, Halifax.	
Spink, Siddal . . . . .	£423 0 0
Tyson Bros. . . . .	360 0 0
Dewhurst . . . . .	360 0 0
Bottomley . . . . .	356 0 0
MANN (accepted) . . . . .	312 0 0
Surveyor's estimate . . . . .	371 0 0

For the Paving of the Hebble Brook, Halifax.	
Dovenor, Sowerby Bridge . . . . .	£1,185 0 0
Tyson Bros., Halifax . . . . .	1,131 0 0
M'Knight, Halifax . . . . .	975 0 0
Brook & Son, Halifax . . . . .	947 0 0
Patefield, Halifax . . . . .	939 0 0
Hopkinson & Sons, Halifax . . . . .	865 0 0
Dewhurst, Halifax . . . . .	864 0 0
NEWELL, Manchester (accepted) . . . . .	855 0 0
Surveyor's estimate . . . . .	872 0 0

## HECKMONDWIKE.

For Erection of Business Premises, in the Market Place, Heckmondwike, Mr. W. ELLIS, Architect, Heckmondwike.	
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## Accepted Tenders.

Whitehay, Heckmondwike, excavator, mason, and bricklayer . . . . .	£460 0 0
Oddy, Heckmondwike, carpenter and joiner . . . . .	257 0 0
Brook, Heckmondwike, plumber and glazier . . . . .	74 14 0
Carr, Low Moor, carver . . . . .	50 0 0
S. & S. Clark, Batley, ironfounder . . . . .	40 0 0
Metcalf & Lockwood, Heckmondwike, plasterer . . . . .	40 0 0
Hardy & Shackleton, Heckmondwike, slater . . . . .	40 0 0

## HINCKLEY.

For Erection of House at Hinckley, for Mr. John Lord, Mr. J. WILLS, Architect.	
T. & G. Harrold, Hinckley . . . . .	£398 10 0
Smith, Chilvers Coton . . . . .	388 0 0
J. & W. Harrold, Hinckley . . . . .	370 0 0
Norton, Stoney Stanton . . . . .	367 0 0

## ILFORD.

For New Gas Tanks, &c., at Ilford. Mr. JABEZ CHURCH, C.E., Engineer.	
Webster . . . . .	£3,233 0 0
Aird & Sons . . . . .	2,964 0 0
Botterill . . . . .	2,309 0 0
Robins . . . . .	2,100 0 0

## KEITH.

For Restoring portion of Farmstead at Stynil, Keith, destroyed by fire. Mr. THOMSON, Architect, Haughs.	
Gordon, Fochabers, mason . . . . .	£126 0 0
Rennie, Blackhill, Elgin, carpenter . . . . .	228 0 0
Strachan, Keith, slater . . . . .	99 18 6
Total . . . . .	£451 18 6

## KING'S LYNN.

For the Supply of 21,000 best blue Staffordshire paving bricks, 9 by 4 by 1½, at per thousand, for the King's Lynn Urban Sanitary Authority. Mr. JOHN HALL, Borough Surveyor.	
Gibson, Buckley . . . . .	£3 10 0
H. Plowright, Lynn . . . . .	3 1 0
R. S. Plowright, Lynn . . . . .	3 0 0
Mowlett, Oldbury (not carted) . . . . .	3 0 0
Nunnery & Co., Warrington . . . . .	2 18 0
Andrews, Wisbech . . . . .	2 18 0
Wollcroft & Son, Chesterton . . . . .	2 17 6
PATTINSON & Co., Sleaford (accepted) . . . . .	2 17 0

## LONDON.

For Additions, Sunnycote, Hampstead Hill Gardens, N.W., for Mr. H. B. Lee. Messrs. BATTERBURY & HUXLEY, Architects.	
HOLLIDAY & GREENWOOD (accepted).	

For New Sewer, High Street and Holloway Hill, Highgate, for the Hornsey Local Board. Mr. T. DE COURCY MEADE, Surveyor.	
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Dunmore . . . . .	£1,396 16 0
Dixon . . . . .	1,272 19 6
Pizzey . . . . .	925 0 0
Jackson & Son (withdrawn) . . . . .	699 0 0
M'KENZIE, WILLIAMS & Co. (accepted) . . . . .	682 0 0

For the Erection of Two Houses for the Working-Class at William Street, Blackfriars, for the Trustees of Brown's Estate. Mr. W. HAWSON LEES, Architect, 27 Doughty Street, Mecklenburg Square.	
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Morby . . . . .	£2,735 0 0
Hoare . . . . .	2,505 0 0
AXFORD (accepted) . . . . .	2,404 0 0

For Additions, &c., to the Royal Academy. Mr. R. NORMAN SHAW, R.A., Architect. Quantities by Messrs. Franklin & Andrews.	
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Asliby & Horner . . . . .	£24,543 0 0
Kirk & Randall . . . . .	23,576 0 0
Asliby Bros. . . . .	24,498 0 0
Dove Bros. . . . .	23,365 0 0
Conder . . . . .	22,952 0 0
Booth Bros. . . . .	22,745 0 0
Holland & Hannen . . . . .	22,658 0 0
Perry & Co. . . . .	22,103 0 0
Bywaters . . . . .	21,945 0 0
Shaw . . . . .	20,183 0 0

## LONDON—continued.

For Decorations, &c., to Palace Gardens Church, the Mall, Kensington, W. Mr. ALEXANDER PAYNE, Architect.	
Heaton, Butler & Bayne . . . . .	£565 0 0
Ker & Bright . . . . .	487 0 0
Wilkinson & Sons . . . . .	462 0 0
Decorative Co-operators' Association . . . . .	405 5 0
Gregory & Co. . . . .	376 15 0
Hampton & Sons . . . . .	329 15 9
DOBIE & SON (accepted) . . . . .	315 0 0

For Alterations and Additions to Premises, No. 33 Old Broad Street, for Mr. F. Statham Hobson. Mr. R. E. TYLER, Architect. Quantities by Mr. W. Barnett.	
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Asliby Bros. . . . .	£3,554 0 0
Conder . . . . .	3,523 0 0
Lawrence . . . . .	3,490 0 0
J. & J. Greenwood . . . . .	3,396 0 0
Shurmer . . . . .	3,384 0 0
Hunt . . . . .	3,365 0 0
Langmead & Way . . . . .	3,210 0 0

For Alterations and Additions to the London Pavilion Music Hall, Tichborne Street, Haymarket, for the Metropolitan Board of Works. Mr. GEORGE VULLIAMY, Architect. Quantities not supplied.	
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Bradwell . . . . .	£1,790 0 0
Toms . . . . .	1,537 0 0
Pett . . . . .	1,505 10 0
Greenwood . . . . .	1,500 0 0
Macey & Son . . . . .	1,276 0 0
Laing & Son . . . . .	1,170 0 0

For Alterations and Additions to the Chippenham Hotel, Shirland Road, Paddington, for Mr. H. G. Lake. Mr. H. J. TAYLOR, Architect. Quantities by Messrs. New & Son.	
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Allen & Sons . . . . .	£1,125 0 0
Godden . . . . .	839 0 0
Temple & Foster . . . . .	770 0 0
Schlater . . . . .	699 0 0
Mark . . . . .	686 0 0
Thomas & Batland . . . . .	683 0 0
Varden & Son . . . . .	594 1 0

For the Erection of Artisans' Dwellings and Rebuilding Three Compasses Public-house, Rotherhithe Street, S.E. Mr. GEORGE SEDGER, Architect. Quantities by Mr. George Mattress.	
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Martin, Wells & Co. . . . .	£2,680 0 0
W. & H. Castle . . . . .	2,659 0 0
Hunt . . . . .	2,552 0 0
White & Co. . . . .	2,497 0 0
Langmead & Way . . . . .	2,448 0 0
Holloway . . . . .	2,370 0 0
Miller & Son . . . . .	2,300 0 0
Everard . . . . .	2,194 0 0

For Alterations and Additions to All Souls Schools, Marylebone. Mr. ALFRED R. PITE, Architect, 44 Bloomsbury Square, W.C.	
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Hayward & Son . . . . .	£1,533 0 0
Patman & Fotheringham . . . . .	1,473 0 0
Cowland & Co. . . . .	1,448 0 0
Falkner . . . . .	1,293 0 0
Smith & Sons . . . . .	1,267 0 0
Hooper . . . . .	1,255 0 0

For Construction of new Brick Sewers and Works in connection therewith, in Upper George Street, Montagu Square, and Gloucester Place, 1,760 feet of Brick Sewer, for the Vestry of St. Marylebone.	
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Mowlem & Co. . . . .	£3,446 0 0
Neave & Son . . . . .	3,223 0 0
Wilkes & Co. . . . .	2,900 0 0
Dickenson . . . . .	2,600 0 0
Newell & Robson . . . . .	2,350 0 0
Marshall . . . . .	2,300 0 0
Killingback . . . . .	2,245 0 0
MEANS (accepted) . . . . .	2,100 0 0
Standen, jun. . . . .	1,875 0 0

For the Erection of Ambulance Station, Porter's Lodge, and other works at the Western District Hospital, Fulham, for the Managers of the Metropolitan Asylum District. Messrs. A. & C. HANSTON, Architects, 15 Leadenhall Street, E.C. Quantities supplied by Mr. C. Poland.	
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Brass . . . . .	£10,150 0 0
Thorn . . . . .	10,150 0 0
Holland & Hannen . . . . .	10,035 0 0
Gibbs & Flew, Limited . . . . .	10,000 0 0
Wall . . . . .	9,902 0 0
Dove Bros. . . . .	9,895 0 0
Wall Bros. . . . .	9,777 0 0
MOWLEM & Co. (accepted) . . . . .	9,730 0 0

For Painting, Repairs, &c., to Board Schools. Mr. E. R. ROBSON, Architect.	
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Goodman . . . . .	£539 0 0
Nightingale . . . . .	498 0 0
Grover . . . . .	435 0 0
Robey . . . . .	415 0 0
Boyce . . . . .	353 10 0
Sargent . . . . .	347 10 0
Vigar . . . . .	343 4 0
SHURMER (accepted) . . . . .	342 0 0

Goodman . . . . .	£449 0 0
Smith . . . . .	427 0 0
Wal Bros. . . . .	397 0 0
Pritchard . . . . .	392 0 0
Grover . . . . .	383 0 0
McCormick . . . . .	351 0 0
SHURMER (accepted) . . . . .	333 0 0

Green . . . . .	597 0 0
Pritchard . . . . .	557 0 0
Williams . . . . .	520 0 0
Atherton & Latta . . . . .	512 0 0
Grover . . . . .	498 0 0
Willmott . . . . .	478 0 0
Sargent . . . . .	397 0 0
SHURMER (accepted) . . . . .	387 0 0

## LONDON—continued.

For Alterations and Additions to No. 29 Stanley Gardens, Notting Hill. Mr. F. W. HUNT, Architect.	
Kinniamont & Son . . . . .	£1,747 0 0
Downs . . . . .	1,636 0 0
Macey & Sons . . . . .	1,621 0 0
Cowland & Co. . . . .	1,618 0 0
Haylock . . . . .	1,608 0 0
Lapthorne & Co. . . . .	1,575 0 0

## LOWESTOFT.

For Sewer Work, Thurston Road, Lowestoft.	
Bedwell . . . . .	£225 0 0
Lowe . . . . .	175 17 6
Hawkes . . . . .	163 0 0
Church . . . . .	153 0 0
Cook, Bennett & Thew . . . . .	130 0 0

## MAIDSTONE.

For Building Chapel to Maidstone Union. Mr. HENRY A. CHEERS, Architect, Bagshot. Quantities by the Architect.	
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Swain, London . . . . .	£2,160 0 0
W. & H. Castle, London . . . . .	2,100 0 0
Woods, Weybridge . . . . .	1,968 0 0
Battley, London . . . . .	1,887 0 0
Slade, Maidstone . . . . .	1,861 0 0
Higgs, London . . . . .	1,837 0 0
Wood & Sons, Maidstone . . . . .	1,683 0 0
WILKINS, Maidstone (accepted) . . . . .	1,658 0 0

## MOSSLEY.

For Painting and Decorating the Methodist New Connexion Chapel, Mossley. Mr. J. H. BURTON, Architect, Warrington Street, Ashton-under-Lyne.	
McCONNELL, Oldham (accepted).	
Eight tenders were received.	

## NEWTON HEATH.

For Superstructure of St. Mark's Church, Newton Heath. Messrs. TATE & POPPLEWELL, Architects, Manchester. Quantities supplied.	
CORNINGLEY & STOPFORD (accepted without seating) . . . . .	£2,776 0 0
(Foundations already in.)	

## NORTH ORMESBY.

For Laying Out New Cemetery at North Ormesby, Yorks, and Building Chapel and Gate-house for the Bishop of Middlesbrough. Mr. MARTIN GARR, Architect, Middlesbrough.	
CRAGGS & BENSON, Stockton-on-Tees (accepted).	

## NORWOOD.

For Alterations, Additions, and Repairs to Hope Cottage, Church Road, Upper Norwood, for Dr. Hetley. Mr. FREDERIC W. LEDGER, 3 Lombard Court, E.C., Architect.	
Garratt . . . . .	£507 0 0
Smith & Sons . . . . .	475 0 0
J. & C. Bowyer . . . . .	397 0 0
JENKIN (accepted) . . . . .	342 14 0

## RISHANGLES.

For the Restoration of Rishangles Church, Suffolk. Messrs. ARUNDELL & TARTE, Architects, 30 Great James Street, Bedford Row.	
Skuffham & Rampling, Eye . . . . .	£638 4 3
Sindall, Cambridge . . . . .	588 13 9
Crowe, Stowmarket . . . . .	576 14 0
Grimwood, Weybridge . . . . .	467 12 0

## SOUTHAMPTON.

For Rebuilding Nursling Mill, near Southampton.	
Stevens & Sons . . . . .	£593 0 0
Panders . . . . .	530 0 0
JUKES (accepted) . . . . .	575 0 0

## SOUTHEND.

For Building Club-house for the Alexandra Yacht Club Company, Southend. Mr. W. J. WOOD, Architect.	
Piercy, London . . . . .	£1,673 0 0
Harper, London . . . . .	1,272 0 0
Hobbs, London . . . . .	1,250 0 0
Chamberlain & Co., London . . . . .	1,200 0 0
Darke & Son, Southend . . . . .	1,147 0 0
Groome & Co., Southend . . . . .	1,130 0 0
Scott, Southend . . . . .	1,127 0 0
Wood & Co., Southend . . . . .	1,023 0 0
BAKER & WISEMAN, Southend (accepted) . . . . .	999 11 9

## TOTTENHAM.

For Supplying and Laying on Portland Cement Concrete Foundations, Granite Setts to Form Road Crossings, and for Pitching Round Water Troughs, Tottenham. Mr. DE PAPE, Surveyor.	
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Bell . . . . .	£278 0 0
Aspinall & Son . . . . .	212 17 0
Bucket & Son . . . . .	205 6 6
GRIFFITHS (accepted) . . . . .	192 8 6
Wheeler & Hindle . . . . .	187 0 0

For the Construction of a 12-inch Glazed Earthenware Pipe Sewer, &c., St. Ann's Road, Tottenham. Mr. DE PAPE, Surveyor.	
Pizzey, Tottenham . . . . .	£199 0 0
Strachan, Wood Green . . . . .	189 0 0
Taylor, Pimlico . . . . .	174 0 0
Bloomfield, Tottenham . . . . .	168 0 0
YOUNG & Co., Woolston, near Southampton (accepted) . . . . .	160 0 0
Bell, Wood Green . . . . .	155 0 0



## SWANSEA.

For Building Residence in De la Beche Street, Swansea.  
Messrs. JAMES, SEWARD & THOMAS, Architects,  
Swansea and Cardiff. Quantities by the Architects.

Richard & Son	£2,835	0	0
Thomas, Watkins, & Jenkins	2,800	0	0
White	2,765	0	0
Davies	2,690	0	0
Rees	2,559	0	0
Billings	2,430	0	0
MORGAN (accepted)	2,333	0	0

## TODMORDEN.

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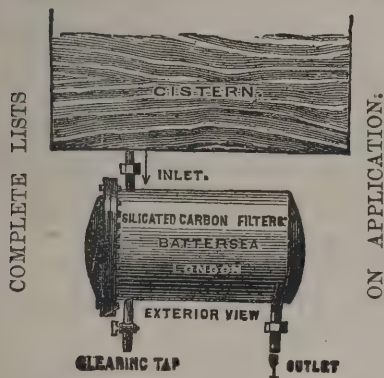
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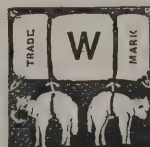
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# The Architect.

## OPEN-AIR SPACE IN SUBURBAN BUILDING.



RECENT Act of Parliament, procured by the Metropolitan Board of Works, entitled the "Metropolis Management and Building Acts Amendment Act, 1882 (45 Victoria, ch. 14), provides that, in building upon hitherto unoccupied ground, there shall be left "open spaces to dwellings," that is to say, back-gardens or yards, of such extent as to measure

superficially, as a minimum, from 150 square feet for the smallest houses to 450 for the largest; these "open spaces," however, may be covered with buildings of the height of one storey above ground. This is to be taken, therefore, as the latest movement in favour of the principle which has so long and so urgently been advocated, that the open-air ventilation of the town should be properly provided for. The reader may perhaps think the Legislature have not even yet gone far enough; and this is the question we ask leave to consider.

To come at once to the practical point, let us take the case of any new district of average class, in the suburbs of London, at present being built over. It is not necessary to have a particular locality in our eye; there are cases of the kind all around the metropolis; indeed there are not very many exceptions to be met with. To begin with, the road is 40 feet wide, and about 6 feet along each side is added for the sake of "gentility" as a forecourt within a railing. The depth of the house itself we may put at 35 feet. The statutory depth of the "open space" in the rear may be put at 15 feet, and this is what is allowed to be partially, or wholly, built upon to the height of one storey above ground.

Now let it be borne in mind that the "laying out" of the "estate" has been done preliminarily by a skilled person. Perhaps this skilled person is the speculation builder, who takes the land by the lump and "makes the most of it" for himself. Perhaps, on the other hand, the plan has been furnished to him beforehand, and prepared by the ground landlord's surveyor under instructions "to make the most of it" for his employer's ground-rents. Perhaps the ground landlord has had a hand in it, to look after himself; perhaps his solicitor is a gentleman of shrewdness and experience in such matters in the capacity of money-provider, and has given to the cause of "making the most of it" the benefit of his own skill. At all events, in any case "making the most of it" has been the great greedy guiding purpose, and if the reader happens to understand the subject he will admit that the dimensions we have given in the typical case above suggested must be taken to represent somewhat liberal dealing. No doubt the depth of 15 feet which we have taken for the back garden may be 30 or 40 feet, or more, when the laying out is very liberal; but there are so many instances in which the land is strictly economised, that we will take leave to regard economy as the rule; and, indeed, we have seen the very smallest spaces turned into such very nice little garden plots, or playgrounds, or smoking promenades, as the case may be, that we feel it would be idle to ignore the fact that the expert laying out of a suburban building estate involves, much more frequently than otherwise, the acceptance of the statutory minimum as an authoritative rule of guidance. We may, therefore, proceed to consider what comes of it.

The proportion thus produced between covered and uncovered ground is this: 35 feet in depth, covered four or five storeys high, including basement and roof attics; uncovered, 20 feet (half the street), *plus* 6 feet (forecourt), *plus* 15 feet (garden or yard), in all 40 feet. Leaving minutiae out of account, we may therefore say that in a vast number of most respectable cases the builder is considered to be doing the right thing when he covers nearly half of every acre of land with houses between 30 and 40 feet high above ground, and perhaps 6 or 8 feet deep underground; and this is quite enough for our present purpose. We simply ask the question whether this ought to be allowed.

The practical circumference of London, over the whole of

which such building operations are at this moment being carried out, may perhaps be put at thirty or forty, possibly fifty miles; and what the Legislature allows to be done is that one ring after another, year after year, like the rings of wood in a tree, shall be very nearly half-covered with lofty houses, leaving no open breathing-spaces at all that ought to be so called, but distributed in perfect regularity, with the remaining half chiefly devoted to the primary purpose of burrows or comparatively narrow traffic-ways between the rows of houses, for the people to pass to and fro, and otherwise to the secondary purpose of little enclosures behind, which sometimes are scarcely sufficient to let light in at the windows. As for real "open spaces," they have to be purchased out of sheer charity by the public authorities from the greedy persons who in this way "make the most" of their land, and whose tenants, be it remarked, would theoretically smother but for this occasional purchase of a few acres as a "lung," at what is simply a stupendous price, to form a park withal; the price which we here take the liberty of calling stupendous being, of course, the very fullest estimated value to which the land can be run up by being in imagination built over upon this purely reckless commercial principle.

Now we cannot hesitate a moment to say that, with such a circumference as London possesses, it is madness to allow the lust of ground-rents to encircle the town with so dense a belt of building as we have described. It is well known that every owner of a few acres of grass land, as his property comes in its turn within the building limit, at once magnifies his fortune twenty or thirty fold. What the true philosophy of political economy would say to his natural title to the whole and sole benefit of this windfall we will not inquire, but it is quite clear that English law has already recognised the right of the public to have a voice in the disposal of the land for actual building operations. Not only must the owner surrender so much of his land as shall form streets of convenient width, but he must surrender so much more of it for the purpose of giving sufficient light and air in the rear. The well-known law whereby the height of a house is limited to the same dimension as the width of the street, is a further instance of the established right of the authorities to determine how much of one's land shall be covered with houses for the owner's adventitious profit, and how much of it shall be left uncovered for the sake of salubrity. Perhaps it is impossible for exact science to demonstrate the precise proportion of one's private land which, in the public interest, ought thus to be allowed to be built over; but for our own part we submit with confidence that to cover half of every acre, or so nearly half as we have been speaking of, is to cover too much. A jury, for instance, of competent men, might be expected anywhere to say so promptly. The very fact of "parks" being in request is proof positive. The annual flight of Londoners at this season to the country for a few weeks' recruiting of their health is proof positive further; for when they speak of requiring "change of air," what they really mean is better expressed by the alternative phrase "a breath 'of fresh air," the air of a town so closely built over being not "fresh"—that is to say, not fresh enough to live by.

What, then, do we actually propose? We need not be at all mealy-mouthed about it. We hold that in the mere interest of the death-rate, or life-rate, of every large town, the density of building ought manifestly—too manifestly to require argument—to be decreased as the diameter increases. We will, indeed, take this to be mathematically self-evident, as the only practical form in which the more simply scientific proposition can be put, that the greater the size of the town the less ought the house-density to be throughout the whole area of the town. We cannot, of course, reduce this density in the old quarters, but we must all the more, therefore, reduce it in the new. Consequently, it seems impossible to deny that the public authorities ought to be endowed with larger powers of restraint than they now possess. As a tentative proposal, why should not every owner of new building-land be compelled to leave at least three-fourths of his land uncovered, including the appropriation here and there of large spaces for such squares and parks as experience proves to be necessary? The owner himself, we shall say, would object; but many owners would, if they could, even curtail the proportion of sacrifice which is already insisted upon. In one view of the matter the restraint, however regulated, is confiscation, no doubt. But, as we have observed, the principle of restraint is already fully accepted; indeed, it is so all over the civilised world. The only question is, What is the proper limit of its application if



the people of a town are to live and not die? One observation further which we may make is this: that when a piece of land now worth 100*l.* an acre as a grass-field is to become worth 2,000*l.* or 3,000*l.* an acre within a few years as building-ground to be only half covered, the owner may very well be satisfied to sacrifice a much larger proportion of so disproportionate an increase than might at first sight seem reasonable.

### ROMAN CONSTRUCTION.\*

WHEN the architecture of Rome is mentioned, it suggests a vision like those which arose before the eyes of PIRANESI, COCKERELL, and ALLOM, when they produced their restorations of the Eternal City. So little is left of that Rome which was the mistress of the world, it is necessary for us to seek the aid of imagination if we would realise what she was in the days of her greatness. But imagination is supposed to be out of place in connection with the scientific archaeology of modern times, and few men have less employed it than Mr. PARKER. He has toiled with the greatest patience in excavating the ground at Rome, but it has not been with the hope that inspired so many among the old school of archaeologists. They sought for statues, vases, bronzes, inscriptions, carved capitals, and other works of art—things that brought gold as well as fame, and excited the envy of rival explorers. Mr. PARKER has been more disinterested. He sought for the remains of the massive walls and fortifications, for the foundations of the palaces, prisons, conduits, or, in other words, for examples of Roman work which were not removable. His investigations have thus a relation to the ordinary labour of the archaeologist that corresponds to the relation between engineering and architecture. A civil engineer might be supposed to undertake the examination of the substructures of Rome (that is, if we can assume one of the profession to abandon his profitable work for a sufficient period), but it is somewhat remarkable to find an amateur, whose knowledge of masonry has been derived from a study of the Gothic churches in England and Normandy, devoting several years of his life for the purpose of gaining accurate knowledge of a kind of work which has been hitherto almost despised. Mr. PARKER has from time to time described what he has done and persuaded others to do in Rome; he has also had photographs taken on a large scale, and plans and sections prepared to enable scholars to understand the character of the construction. But the volumes and illustrations are hardly available for students, and to meet their wants an abridgment has been compiled by Mr. SHADWELL. It forms an excellent little book, which can be read with advantage in schools and colleges, and will be useful in supplementing the ordinary guides to Rome.

The first seven chapters explain the means adopted to fortify Rome from the time when the inhabitants of the Seven Hills were as much opposed to one another as were Highland clans at a later age. The several fortifications were afterwards connected by SERVIUS TULLIUS, and thus formed a sort of continuous protection. From time to time additional works were constructed by other rulers, and if the "Itinerary of Einsiedeln" is accepted as evidence, the fortifications comprised in the ninth century 383 towers, 7,020 battlements, 6 posterns, 106 corbels, and 2,066 large openings. What some of those words meant is not clear. In PLINY's time, it is said, there were eighteen gates. According to another authority the number was fourteen. At present there are twelve in use, and in addition there are five near the Vatican of mediæval and post-mediæval construction.

The existence of so many hill fortresses was an impediment to the laying out of straight and wide means of communication. The most despotic of the emperors was never able to Haussmanise Rome, and it is not unreasonable to conclude that the pictures by modern artists, which represent ancient Roman streets as steep and narrow, are at least as true as most descriptions of historical events. When the banks were no longer required for fortifications they were utilised for sites, houses being built into them or above them or in the fosses, without any consideration for lines of frontage or gradients. We are informed that "it is found usually that the streets within the city occupying the old foss-ways lay about twenty feet below

the ordinary surface of the ground. In some places two pavements have been found at different levels." It is needless to say that outside the gates the roads were of a different kind; economy was often sacrificed to secure a straight line between two towns, a principle that was followed by the late Sir JOHN RENNIE in planning railways.

The Roman aqueducts, which are next described, were wonderful works, although ignorance of hydraulics is often shown in their construction. At a time when a sufficient water-supply for London appears to be unattainable it should be known that the nine aqueducts conveyed to Rome a quantity that was equal to a stream 20 feet wide by 6 feet deep, flowing at an inclination six times as rapid as that of the Thames. A better notion of the Roman water-supply may be formed when it is said that the aqueducts carried 333,000,000 gallons every day into the city.

But the making of roads, aqueducts, and fortifications can hardly be considered architect's work, and Mr. SHADWELL's book might, with accuracy, be called the Engineering History of Rome. Some types of buildings are, however, described. First are the baths, which of course are related to the work for water-supply. The description of the remains of the *Thermæ of CARACALLA* will indicate the grandeur that was combined with sanitation in Rome:—

The walls are sufficiently perfect to allow the outline to be made out; they exhibit the plan of a square of 1,100 feet on each side. The front of the central building is 720 feet long, the width across 375 feet, and from this, in the centre of the western side, the calidarium, or hot-air chamber, circular in form, projects 150 feet. The walls of this last are all hollow, with hot-air flues, heated by the hypocaust in the underground chamber. The piers of the calidarium are about 180 feet high. The various chambers are divided into compartments of shallow basins, with shelving sides, from 2 to 3 feet deep, while the frigidarium has vertical sides, and is 4½ feet deep, admitting a header plunge. The whole of the bath chambers are paved with mosaic, replaced where faulty by marble fragments inlaid with cement. The material for the walls throughout is of brick 1½ to 1¾ inch thick. But the fallen capitals attest the great magnificence of the ornamental portions, and a prostrate granite column measures the extraordinary diameter of 5 feet 8 inches. Nothing of the marble porticoes surrounding the whole building remains. But the apparatus for bathing occupied only a portion of the enclosed space; provision was made for athletic exercises and games, which required an arena, and part of the ground was planted so as to afford shady walks. Against the western external wall are the remains of the great reservoir of water, and of the aqueduct, the latter covered with tiers of seats, and immediately below them is a space which is considered to have been a stadium.

Chapters are also given on the Forum Romanum, the Mausolea, the Colosseum, the Palaces of the *CESARS*, and the information represents the latest researches.

However interesting Roman work may be owing to its associations, classicists must admit that there is little of it which suggests that beauty was sought after. The construction which is shown in Mr. PARKER's photographs is more allied to what is found in modern railways, harbours, and sewers than to the masonry of Greece or Mediæval Europe. It may be said that, with the exception of the Pantheon, the stability of the work is as much owing to the quantity of material that was employed as to its scientific distribution. The walls are of colossal dimensions, but they could have been made equally strong with much less material if the exterior had been "battered" like modern retaining walls. The great wall of *AURELIAN* was, notwithstanding its dimensions, unable to resist the blow of a battering ram. The voussoirs of the arches are of unnecessary depth, and generally they are uniform in size from the crown to the springing. All things considered, the best work of the Romans is to be seen in their concrete walls. The material was carefully compounded, and in this kind of construction there are not so many examples by the builders of other nations to allow of a comparison. Some of the Roman concrete walls will only succumb to gunpowder and dynamite. The Italian Government attempted the destruction of a wall of concrete on the Quirinal, but the operation was found to be so expensive it had to be abandoned.

In the use of what is known of late days as veneering, the Romans were adepts. It is often difficult to guess the material which forms the principal constituent in a Roman wall, and in some of the systems the nature of the exterior is a puzzle. Thus, for example, Mr. PARKER says that:—

The *opus reticulatum* is often supposed by casual observers to be of brick, as the small diamond-shaped blocks, or wedges of

\* "The Architectural History of the City of Rome," based on J. H. Parker's "Archæology of Rome" for the use of Students. By Arthur Shadwell, M.A. Parker & Co.



tufa look very like brick at first sight; there are also at the angles blocks of large size, closely resembling modern English bricks, but rather larger; they are, however, of stone, with a flat surface, wedged or pointed off at the back, and driven into the concrete while wet before the lime had set.

Mr. PARKER tells us it is a mistake to suppose that marble was ever commonly used in Rome. The facings, cornices, columns, and whatever part was seen were often of marble, but for the other parts a less expensive material was adopted. Marble was in demand, and it would appear that our Devonshire "pudding stone" was much esteemed.

## STUDIES OF SOME LONDON CHURCHES.

(Concluded from page 79.)

MUCH as it is to be regretted that the splendid chapel at Ely Place, Holborn, did not become the church for the Welsh congregation in London, as had been hoped some years since, yet it must be a subject of congratulation, from an architectural standpoint, that in Roman Catholic hands the chapel has been so well restored, thus being utilised for those of the same faith its founders intended. The exquisite proportion of the side windows, as well as the beauty of the mouldings and tracery, cannot but strike the most casual of observers. This effect is materially aided by the great thickness of the walls. In fact, the reveals of the windows are so deep that one might almost imagine there was the Continental plan of a series of chapels between the buttresses, with arches opening out into the same. However, a second glance, showing the walls solid up to the window-sills, effectually does away with this notion. Again, how charming is the manner in which the slightly-projecting canopy work between the window-piers is treated, thus well connecting the composition, an object which the figures on brackets to the piers still further help. Turning one's eyes up to the roof, it must be seen at a glance that the design is unsuitable to the noble substructure on which it is mounted. In construction it consists of principal trusses, each of the common rafters also forming a species of truss. Though having evidently always been intended as open-timbered, the treatment does not seem good enough, or to sufficiently harmonise with the walls. There is no cornice, the spurs to each rafter standing directly on the top of the stone walls. Were this roof boarded on the under-side of the rafters, and ribs fixed, forming it into panels; were it painted, a good moulded cornice added, and a simple stone projecting course under the latter, how much superior would the effect be! But we must take things as we find them, and any such extensive addition to the features of Mediæval work might be considered not only impertinent, but almost sacrilegious.

The *Church of St. Martin*, Ludgate, designed by Sir CHRISTOPHER WREN, is remarkably picturesque and effective in plan, of a type which the great architect rather favoured, having a square as the governing idea. One can scarcely suppose that he was *always* tied to a site suggesting this proportion. To describe the church without referring to a plan is rather difficult, but must be essayed. Anyone who does not understand can easily go and instruct himself by examining the church, which is in no out-of-the-way locality. Picture a square subdivided into nine smaller squares. The central squares towards the cardinal points have semicircular vaults; the four squares in the corners have flat ceilings. The effect of this composition is good, though the middle portion of the church is a little dark, owing to light being only admitted from the north. This side seems comparatively open, considering it is in the City, and through the windows a peep of a splendid tree is obtained. There is a south gallery, treated plainly, without any ornamentation. The reredos is of a good type, judiciously gilded, and mercifully without any broken pediments. The columns are raised on very high pedestals, lined with oak panels, a feature too often found in churches of this date, for it always gives the uncomfortable idea of stone resting on wood; and though one knows there is a solid stone or brick pier behind the panelling, it would surely be better to at once show this, rather than shroud it up. The fittings are apparently as they were in WREN's time—high pews and a reading-desk with clerk's desk attached.

*St. Swithin*, London Stone, is another of WREN's churches, and, like the last-named, is square, but not subdivided. The plan of the square is altered into an octagon at the ceiling

level, and domed over, the soffite of the triangular parts being flat. The diagonal sides of this cupola have a kind of lunette, which, though well accomplishing its purpose of shedding light downwards, injures the effect of the paintings. Owing to the square proportions of the building, and its being of no great size, it was obviously impossible for Sir CHRISTOPHER to have contrived any chancel west of the sanctuary. The latter does not occupy the whole width of the church, and so the choir seats are placed north and south of it—much the best and the only practicable arrangement under the circumstances. To lay down hard and fast rules is easy, but when one has to deal with old churches, the structural formation of which renders compliance awkward, and in effect impracticable, it is wiser to throw the rules to the four winds of heaven, and do the best in other ways. It is in getting well over difficulties of this kind that the man of genius displays himself. The organ is placed on the ground-floor at the east end of the gallery, which has been cut away for that purpose. There are low seats, the church having been altered a few years since, but the old high, dark oak wainscoting still remains round the walls. It need scarcely be said this gives a very handsome appearance to the building. As regards the windows, it is a subject of regret that here, as in other of WREN's churches, a kind of Veneto-Italian tracery has been introduced quite out of character with the style of the architect.

The reader's attention is now to be directed to a far different structure—the fine *Church of St. Mary*, Dartmouth Park, Highgate, designed by Mr. BUTTERFIELD, and, as might be expected, showing many of the peculiarities of the master. The nave comprises four bays of equal width, with a shorter western bay. The area at the western end is left free of seats—always an advantageous arrangement when possible, greatly tending to dignity. There is a porch towards this end of the church, with a gable facing south; but the outer archway is towards the east, thus preventing draught. *St. Mary's* is very lofty, with open timber roof, a clerestory of some importance, and lean-to aisles, with windows of a good size in the latter. There is a curious and inelegant feature in the nave arcade. The mouldings are in two chamfered orders, which, instead of running straight down to the circular abacus, where they would of course dispose themselves comfortably, are stopped square-wise a little above the springing line of the arches, the consequence being that they encroach beyond the usual bounds of the abacus. In old examples one sometimes finds instances of this. It is one of the charms of Mediæval work that the architects were not so straight-laced as we are now in this respect—they did not mind departing from precedent where there was a valid and sufficient reason for so doing. But in this case there seems no object for the departure from the usual practice. There is another unusual feature in the aisle windows, which are ranged in recesses, and the spandrels filled in with brickwork in chequer patterns. Over the centre of the windows an intermediate truss occurs, a place where, if possible, one likes to avoid more than ordinary weight coming. There are "mask" label terminations over the nave arches. When one remembers the object of these ornaments, and the curious shadows they cast are called to mind, it seems scarcely worth while to reproduce in modern times this little fancy of the Mediævalists. The same remark applies to the gargoyles to the pinnacles of the nave parapet, which do not really throw out the rain-water beyond the walls, but are only make-believe. On the other hand, the water from the nave roof is conducted into transverse sunk gutters in the aisle roof—a very good plan, preventing ugly stains, and possible irruption of water under the tiles or slates when a strong wind is blowing. There is much that is dignified in this church, with its grand proportions, but some straining after novelty and a want of grace.

In the *Church of St. Luke*, Burdett Road, Stepney, we have a building designed in Mr. BLOMFIELD's characteristic style. It is plainly and substantially constructed of brick, and pointed internally. The plan consists of nave and aisles, with chancel and aisles. There is a gabled bell-turret over the chancel arch, in that position where of old the Sanctus bell-cot used to be located. It is a change to see a turret in this position instead of at the west end, the almost inevitable situation. The reason why the turret is generally placed westwards is plain enough, as it is more convenient to ring the bell in this position, and constructionally it is easier to carry. There is a clerestory of lancet windows, which occur both over the piers and the centres of the arches. A plentiful supply of



light from a height is very necessary, as there are no windows to the aisles, for neighbouring buildings closely abut on the sides of the church. The ceilings are of wood, cradle-shaped, that to the nave with tie-beam king-post principals. Last, not least, there is a very handsome mosaic reredos. Although, as may have been gathered from the previous remarks, nothing very novel is apparent in the design, it is always a pleasure to see something scholarly (to speak from an architectural point) and churchlike, and suited to its purpose, particularly in the East End of London, where the surroundings are generally commonplace and uninteresting.

*St. Peter's-upon-Cornhill*—the fine Wrenian church—has several characteristic features, and altogether much merits notice. The semicircular arches of the nave arcade are continued north and south, thus forming also the vault of the aisles, the latter in turn having semicircular openings between each bay. The piers carrying the arcade are set upon very lofty pedestals (the same height as the panelling round the church), which are panelled with oak. Before the church was reseated, in the year 1872, the pedestals must have looked in better proportion, when the pews were higher. There is a semicircular, carved, plaster ceiling to the nave. In the central panel, looked at longitudinally, are circles which necessarily are rather distorted in perspective, and are not altogether pleasing. The oak chancel screen is very effective, extending the whole width of the building with doorways opening into both the nave and aisles, the former surmounted by the Royal arms and supporters. The screen is composed of semicircular arches on piers, every alternate one having a pendant. This does not look amiss, and tends to less intercept the view eastwards. The east end, with its fine windows in the lower range (*i.e.* exclusive of the two windows to the aisles), and its three windows in the upper range, all filled with painted glass, has a striking effect.

Perhaps from the foregoing notes the reader may derive a little profit. It seemed worth while to collect these impressions jotted down from time to time. London is truly a wonderful city, and affords an almost endless fund of instruction to those who care to examine all its array of churches, ancient and modern. He is in truth a great traveller who knows all the ins-and-outs of its vast store of ecclesiastical architecture, good, bad, and indifferent. Excelsior!

### PARIS NOTES.

THE members of the special committee appointed by the Société des Artistes Français to study and report upon the best way of employing the profits realised from the 1882 and 1883 Salons, have held several meetings. It has been decided that a fifth of the profits, both of past and future years, shall be devoted to the relief of the most needy members of the association; a further sum will be set aside each year for the payment of substantial pensions to aged and invalid artists in poor circumstances, and to the widows and children of members who may need assistance; while special rooms are to be provided in the principal hospitals and almshouses of Paris for the reception of artists. Finally, the profits will bear the whole expense of the campaign about to be undertaken by the society in defence of art property. A special staff will have to be organised for carrying these several plans into execution. It has been recommended by another committee of the same association, which was charged to report upon the best means to be taken for defending the right of every artist to the absolute property of his productions, that a special agency should be established to look after the interest of members, and M. Tony Robert-Fleury has been requested to draw up the necessary report upon this important subject. The recommendations of both these committees will be submitted for approval at the next meeting of the Committee of Ninety, the supreme managing body of the Society.

Preparations for the Triennial Salon, to be opened on the 15th of next month, are being pushed forward with great energy, and the Palais de l'Industrie is at the present moment, as the French say, *dessus-dessous*—turned upside down thereby. The space occupied by this exhibition will be exactly the same as that taken up by the yearly Salon, and as the number of works to be admitted is strictly limited, every opportunity will be afforded for the adequate display of each exhibit. The nave of the great building is set aside for sculpture and architecture, the first-floor galleries being devoted to the paintings. The whole of the ground-floor

will be hung with Gobelins tapestries, lent by the Garde Meuble and the Gobelins manufactory itself, many of which have never before been open for public inspection. It is intended that the opening ceremony shall be of a most imposing character, and all arrangements for it will be made under the personal supervision of M. Jules Ferry, Premier and Minister of Fine Arts, who will preside on the occasion.

The French Government have decided to make, in connection with the Amsterdam International Exhibition, the following nominations and promotions in the Legion d'Honneur: Two Commander's crosses, five Officer's crosses, and fifty Knight's crosses.

A statue of the painter Henri Regnault has just been placed in position on the façade of the new Hôtel de Ville. The sculptor has represented him in the uniform of a National Guard, using the brush with the left hand.

M. Louis Edouard Dubufe, the painter, died on Friday evening in last week at Versailles after a long and painful illness. Like his father, he was known principally as a portrait-painter. His most popular portraits are those of *Jules Janin, Rosa Bonheur, The Empress Eugénie, The Princess Mathilde, The Marchioness de Gallifet, The Princess Ghika, General Fleury, Count Newerkerque, Dumas Fils, and Emile Augier*. He was sixty-three years of age, and had received innumerable medals. He was made a Knight of the Legion d'Honneur in 1853, and promoted Officer in 1869.

M. Alophe, who obtained great success at the Salon Exhibitions of 1846 to 1850, has just died of heart disease at Bourges. He was a pupil of Paul Delaroche, and made himself famous by his *Dernier Ami*, for which he received a first medal at the Salon. This picture represents an artist on his deathbed with no attendant but a faithful dog.

It has been decided that the annual sum of 3,000 frs., left by Madame Leprince to the Academy of Fine Arts, shall in future be divided equally between the successful competitors for the Grand Prix de Rome in painting, sculpture, and architecture. Consequently MM. Marcel Baschet, Lombard, and Redon, who obtained the awards of the jury this year, will each receive 1,000 frs. M. Redon, moreover, takes the Prix Delannoy of 1,000 frs., left by the architect of that name in 1867 to the Academy of Fine Arts, to be handed over each year to the winner of the Grand Prix in architecture; and M. Quatesons, this year's second Grand Prix, obtains 500 frs. from the legacy of Madame Lusson. On the other hand, M. Lombard having been awarded the Prix de Rome in sculpture, ceases to be the titular possessor of the *Bourse de Voyage* given him by the Salon committee, and which is now transferred to M. Cornu-Vital, who came second in number of votes at the election. Another prize founded lately is that of MM. René and Henri Chapelain, former pupils of the Ecole des Beaux-Arts. Under this foundation the Société Centrale des Architectes is authorised to award each year the sum of 1,000 frs. to the architectural pupil of the School of Fine Arts who has shown the greatest ability in the sister arts of painting and sculpture. The conditions of the competition, as established by the Society of Architects, are that the young architects who have gained the most class prizes at the school from May to May of each year in the section of decorative design, shall each send in a series of five water-colour paintings, and the 1,000 frs. prize will be awarded in accordance with the merit of these drawings.

The refusal of the Paris Municipal Council to sanction the proposed City Loan of 220,000,000 frs. for public works, necessitates the, at any rate, temporary abandonment of several important projects. Among these may be particularly mentioned the reconstruction of the Sorbonne; the building of the two public *lycées* or colleges proposed for the 7th and 11th Arrondissements; the construction of several new mairies and improvements to existing ones; the completion of the Avenue Parmentier, set down for 4,000,000 frs.; the continuation of the Avenue de la République throughout the 20th Arrondissement, estimated to cost 6,000,000 frs.; and the cleansing of the Bièvre stream, 3,000,000 frs. On the other hand, the 90,000,000 frs. required for the improvement of the city drainage system will probably be found, as the Council has referred this part of the prefectorial scheme back to the Works Committee for further consideration. The same remark applies to the scheme for the opening up of the Palais Royal, an account of which was given in a late number of *The Architect*. The expense of carrying out this project is to be borne in equal shares by the City and the Bank of France.



## THE DUBLIN MUSEUM AND LIBRARY COMPETITION.

THE following are the official conditions of the competition for the proposed Science and Art and National Library Buildings, Kildare Street, Dublin:—

The courtyard in front of Leinster House is not to be encroached upon by the new buildings beyond such projections before the general alignment of the façades as may be necessary to give character and effect to the design, and in the general arrangement of the buildings on their respective sites the extent to which it may be desirable to keep back the Kildare Street façades from the alignment of the existing buildings must be carefully considered.

It is desirable that the group to be formed of the two new buildings on the north and south sides of Leinster House courtyard should be in harmony with the architectural character of Leinster House.

The proposed National Library is to be placed on the north side of the courtyard, and in the arrangement of the design and in connection with it is to be shown on the portion of the site now occupied by the Schools of Art, the outline [in sufficient detail to admit of estimating the cost] of a new lecture theatre, laboratory and offices, for the Royal Dublin Society, in substitution for the present establishment on the south side of Leinster House. The design for this latter building (the new theatre, &c.) is to be so arranged as to admit of the postponement of its being carried out without affecting the erection of the library building.

The library is to be constructed so as to contain 800,000 volumes when completed, heated by hot water, with provision for security against fire and thieves, and for ventilation.

A general reading-room is to be provided with accommodation for a hundred readers, a separate room for twenty-four ladies, and two rooms for special students, with suitable cloak-rooms, lavatories, &c.

There will be required also a room for the meeting of the trustees, and rooms for the librarian, assistants, clerks, book-binders, and for storing books, &c., and the design must be so arranged that the postponement of any part of the buildings which may be placed on the portions of the site indicated by red hatched lines will not diminish the accommodation for books below 400,000 volumes.

The new museum buildings are to be placed on the southern side of the site, and are to be designed so as to admit of the postponement of the erection of any part of the building which it may be proposed to place on that portion of the site indicated on the map by red hatched lines now occupied by the lecture-theatre, &c., which while retained in their present position must not be injuriously affected by the interception of light or otherwise.

In connection with the design for the museum buildings, a sketch design for the schools of art proposed to be transposed from their present position should also be given in the same detail as that required for the new Royal Dublin Society theatre, &c., proposed to be transposed to the north side.

The greater portion of the area marked on the site map as the Shelbourne Yard will be available for this purpose.

The present Natural History Museum will be retained as such, and, together with the curved gallery, is to be connected with the proposed new museum building, so as to afford easy circulation throughout.

The design for the proposed new museum building should provide a total floor area of 74,000 superficial feet, including a general refreshment-room and retiring-rooms for both sexes.

The necessary store and preparation-rooms, arrangements for heating, &c., may be placed in a basement—due care to be taken in the construction to guard against risk of fire.

The new lecture theatre, &c., which is to be provided on the north side of Leinster House is to be connected therewith by a covered communication, and to be suitable for seating 500 persons exclusive of any gallery, with convenient access for the public; also rooms to be provided for chemical and physical experiments and apparatus, balance room, engine room, &c.

There will be two divisions of the competition; a preliminary one of sketch designs open to all, and a final one limited as hereafter described.

A committee of selection, one of whom at least shall be an architect (who shall not be a competitor, or interested directly or indirectly in either the preliminary or final competitions), will be appointed by the Lords Commissioners of Her Majesty's Treasury.

It shall be the function of the committee of selection to select from the designs submitted such a number—not exceeding five—as shall appear to them to be of decided merit, the authors of which shall be invited to compete in the second and final competition.

Separate conditions will be issued for the final competition. They will be in strict accordance with the above, so far as applicable, but with such additions or alterations as may be deemed necessary by the Commissioners of Public Works.

The commissioners reserve to themselves the power of publicly exhibiting the designs after the report of the committee of selection.

In the preliminary competition the designs of competitors shall be exhibited by sketch plans, elevations, and sections, to a scale of twenty feet to the inch, consisting of a plan of each floor, elevation of each façade, one section of each building, and a perspective view taken upon a picture line A B on the site plan; such perspective view shall be drawn to such a scale that the drawing shall not exceed the size of the other drawings. The perspective drawing shall be executed in pen and ink, without colour of any sort, save (at the option of competitors) a flat tint of Indian ink in the door and window openings, and on the roofs. In order to reduce the size of the drawings (which shall not be larger than double elephant) only such parts of the existing buildings as are affected by the design need be shown.

The geometrical elevations of the exterior and façades to the central courtyard shall be in outline only, without etching or shading of any kind, except that a flat tint of light Indian ink may indicate the clear openings of doors and windows and roofs.

There will be supplied with these instructions a general plan of the existing buildings, and an elevation of Leinster House—both to a scale of 20 feet to an inch—and sections of the site and of the buildings will be given, for the information of competing architects.

The entrances to the buildings will be from the courtyard, the present walls of which and the old buildings on the site are to be removed.

It is required that the entire cost of carrying out the design for the museum and library buildings to its complete and full extent, including any sculptural work and all architectural embellishments shown on the drawings, and all necessary appliances for heating and ventilating, with 10 per cent. for contingencies and architect's commission—but excluding internal decoration, painting, gilding and furnishing—shall not exceed the sum of 110,000/. The cost of the new lecture theatre, &c., and the new schools of art is not to exceed the sum of 12,000/., and any design adjudged to be likely to exceed these amounts will be set aside.

Each sketch design is to be accompanied by a description of the accommodation (stating the areas) provided on each floor, the total cubical contents of the building measured from the top of the footings up to half way between the wall plate and the ridge of the roof, an explanation of the material and mode of construction proposed to be adopted, and an approximate estimate of the cost, to which the competitor will be required to adhere in his matured design, should he be one of those selected to enter into the final competition. The description should further explain how the design can be carried out in segments so as to admit of the parts completed being occupied pending the final completion of the buildings.

The commissioners reserve the power of referring any or all of the selected designs to a competent building surveyor, to report on the probability of its being carried out for the amounts as above stated, viz., 110,000/. and 12,000/.

In the final competition, plans, elevations, sections, or other drawings to a scale of eight feet to the inch will be required, in which the author's sketch designs and no other shall be fully matured, and each of the competitors so selected shall be paid the sum of 150/. towards his expenses, provided he complies with all these conditions and those to be hereafter prescribed for such final competition.

On receiving the report of the committee on the final competition, the Lords of the Treasury will select the author of one of them for employment as architect for the new buildings.

The remuneration of the architect selected will be such a fixed sum as would be equivalent to 5 per cent. upon the amount which the Treasury may authorise to be expended upon the building, it being understood that the sum of 150/. is to be reckoned as part of this commission of 5 per cent., and his employment will be subject to conditions which will be stated by the Commissioners of Public Works.

Until after the award in the final competition is given and officially made public, no drawings or photographs, or written or printed statements descriptive of or alluding to any of the competitive designs lodged in either the preliminary or final competitions, shall be sent to any member of the committee of selection or to the public; nor shall any of the designs or copies thereof be exhibited publicly or privately, nor shall any canvassing of the committee of selection in favour of any particular design take place. The design of any competitor who shall violate this condition will be forthwith excluded from the competition.

Each design in the preliminary competition shall have a device or motto marked on each drawing, and be accompanied by a sealed letter bearing the same device or motto, addressed to the Secretary, Office of Public Works, Dublin, giving the name and address of the author, which shall only be opened after the selection is made, and for the purpose of ascertaining the names of the architects to be invited to send in plans in the final competition, or for the return of unsuccessful designs to their authors. Each set of drawings, if forwarded in a case, must be properly secured and sealed and marked on the inside of the lid, and in no other place, with the device or motto by which the drawings are distinguished.

All designs in the preliminary competition shall be deli-



vered, at the expense of the competitor, at or before twelve o'clock, noon, on November 15, 1883; any designs which may arrive after that time will be set aside, unless the delay shall be occasioned by accidents in transit, of which proof satisfactory to the committee of selection must be given.

The designs of unsuccessful competitors in the preliminary competition will be returned to them at the expense of the Commissioners of Public Works, but all the selected designs will remain the property of the Government.

### ART TEACHING IN FRANCE.

THE report of the Science and Art Department contains the following notes on a visit to Paris in May and June 1882, by Mr. T. Armstrong, the Director for Art at South Kensington, undertaken in accordance with the request of the Royal Commission on Technical Instruction by the direction of the Lords of the Committee of Council on Education:—

We visited the Musée des Arts Décoratifs in the Palais de l'Industrie. Among modern works the composition of Galland for wall decorations was most interesting. There are some casts of which we ought to have copies. The illustrated catalogue, the only one to be had, is incomplete. At 1 p.m. we went to the Direction des Beaux-Arts and took up M. Crost, who went with us to the Palais des Beaux-Arts, where we met M. Muntz, the librarian, M. Dubois, and M. Paul Colin. We looked through the fine collection of casts, saw the library, and visited the workshops of the moulders. There are many works here of which we ought to have copies, some for the schools and others for the museum.

There is a most interesting coloured cast of the della Robbia frieze at Pistoia. This, it seems, was cast for the French Government in 1832. It has been coloured or re-coloured lately, in imitation of the original, and varnished. The moulds, I was told, still exist in the cellars of the school, but are in a very bad state. I saw a cast from one of the reliefs at the base of Giotto's tower, which I have had leave to order for our museum, and also the whole of one of the gates (Florence Baptistery) and part of the other, which the Boston people wish us to join at casting. In the courtyard of the Palais des Beaux-Arts are many fragments of French Renaissance carved ornament, which are very desirable for our museum. Many of them have, I think, been cast lately for the new "Musée de la Sculpture Comparée," so they can easily be had. M. Muntz showed me his reproductions of Italian and other medals cast in plaster, to which a metallic lustre was given by the application of black-lead. He told me that very good casts were obtained, and they considered them quite as good for educational purposes as our more expensive electrotypes. I spoke to M. Muntz of my desire to find some good figure drawings (*académies*) for reproduction, by Flandrin or some of the best French artists, and he said he was about to make a selection from the drawings made by students of the school to which medals had been awarded.

In the evening we visited the Ecole Nationale des Arts Décoratifs in the Rue de l'Ecole de Médecine, formerly called "Ecole Nationale, de Dessin and de Mathématiques." The instruction is gratuitous, and boys of ten are admitted to the morning classes. For the evening classes fourteen is the limit, and all must be able to read and write. The students all begin with geometrical drawing, and go through a course of drawing from flat examples of human features, heads, and finally entire figures (*Bargue*), before being admitted to draw from the round, or what is called *l'antique fragmentaire*, a bust or a portion of a statue, and to the modelling of ornament. On the evening we were there some of the class were drawing from a cast of a hind's head and neck, cast from nature apparently, others from an antique bust.

We next visited the life-class, where a male model was standing. There were eleven modellers at work on the outer edge of the amphitheatre, and their figures were done (in relief) on ingeniously-contrived boards, which were attached to columns, and turned on a vertical pivot or hinge. Great economy of space was the result. There was room for two or three more modellers. The students who were drawing sat inside. They were not very numerous, but their small number was accounted for by a recent competition; for many of them, it is said, relax a little after the strain of extra work. The modelling from the living model did not seem to us so good as that of our best students in training and national scholars at South Kensington, but the average was perhaps better.

We afterwards saw the ornament class, composed mainly of boys from fifteen to eighteen. The room was quite full, and the young people were working with good spirit. The beginners have mouldings given them to copy first; and when they have mastered the sections they proceed to copy the ornament on its surface. They afterwards work from more intricate ornaments: from casts of flowers, from animals, and from heads; but all the work in this room is such as can be done while the student is seated at a desk with the example hanging on the wall before him.

The director afterwards got together, for us to see, a great number of drawings which had been done in a recent competition. These were executed in water-colours. One of the subjects given

was an arm-chair, and generally it was given in profile, in front elevation, and in perspective, while a full-sized drawing of the silk or other stuff to be used for the back and seat was added. We saw other designs executed in colours, none better than the best of those done by our national scholars, and a number of paintings in water-colours, the result of a competition, of large plants done from nature without backgrounds. This most interesting school we visited again to be present at the adjudication of prizes in a competition for modelling a group of flowers from nature.

On Friday, the 26th, we went by appointment to the Direction des Beaux Arts in the Rue de Valois to see the drawings made in the month of April by candidates for the diploma of professor (drawing-master) at what is called a "session." It is a sort of rehearsal for the examination which takes place in August. There was nothing very striking or interesting in these works. Those produced in Paris in the good schools stood in the same relation to the work from small country towns as the work done in our training-schools does to that sent up from the country.

In the afternoon we visited a drawing-school for girls in the Rue de Seine. This school was founded in 1802, and was for some time under the direction of Mdle. Rosa Bonheur. The teaching is free, and students are admitted from twelve to twenty-five. It is kept up by the State. There were 140 girls present at that time, and 338 inscribed in the books. The hours of attendance are from ten to three. All the students sat rather closely packed in one low room, lighted from the roof, which was in ridges. This mode of lighting was very suitable to the work they were about. Although they were rather close together, and it was not easy for the teachers to move about among them, they had room enough for their work, and each had a good view of the example she was copying. We saw them drawing from four plants and four casts, ranged alternately on the same line. The plant at the end where the beginners were working was simple in its forms, while the succeeding one was more complex and difficult to draw. So with the casts, which ranged from simple geometrical reliefs to the Psyche (Naples). We saw some still-life paintings which were very good, and a great number of coloured designs which were excellent. The best had been done in a competition, and we were told that the average attendance of the girls who had done the best designs (for a cup) was four years.

On May 27 we went to see the new collection of casts at the Trocadero, called Le Musée de la Sculpture Comparée, which is for the most part national. It is, as far as may be, chronologically arranged, with here and there examples from the art of other countries—Assyrian, Greek, and Italian Renaissance. Some of the draped figures from the Gothic cathedrals are of extraordinary beauty. We should do well to follow the example of the French and get together a collection of casts from Gothic and Renaissance sculpture, arranged chronologically. In the afternoon we went by appointment to the Ecole Nationale des Arts Décoratifs to be present at the judging of works in a competition of two sections of modellers. The judges were M. Millet and another sculptor, M. Hedin, engaged on works for the Paris municipality.

On Tuesday, the 30th, we visited the school in the Rue Tournefort, which is a technical school (*école professionnelle*). The boys come in from ten to twelve years of age. They all have four hours a week for drawing—one lesson of two hours, and two lessons of one hour. There is no drawing from flat examples. We saw the books they keep (*livrets*) of the work they are executing in the technical part of the school, the joiner's shop, or the smithy. We inspected four of these books by boys of twelve and a half, thirteen, fourteen, and fifteen years respectively. Boys from eleven to thirteen make in one and a half hours a model in clay in low relief, from a pattern drawn on the squared blackboard, about the size of a tile; this is a lesson in composition. The very little boys modelled on slates from an example done before them on the blackboard. While the class was sitting the master called on the boys for modelled compositions; these were first drawn in white chalk on the slate, and then done in clay. Modelling is done from casts first, and afterwards from shaded lithographs. We saw a composition, a pattern, by a child of six years at its third lesson in clay. When a boy has chosen his vocation he has three hours a week for modelling or carving in wood or stone.

There were 250 boys in the workshops. They carry about in their pockets the bits of wood or iron on which they are working. Little children, from six to nine, begin to draw on squared paper with coloured pencil. The master draws on the squared blackboard some familiar object—a toy, a house, or an animal—and it is copied on the squared paper. The squared paper is used also in the *asiles*, or *écoles maternelles*, for very little children. The younger boys are encouraged to do drawings at home, for which they get little prizes, such as very small coloured lithographs. Perspective is taught at the beginning on the squared board. For composition one hour a week is given, which for some of the pupils makes a total of five hours a week given to art work. Children leave the *asiles* or *écoles maternelles* at six. While there they draw, but in the *écoles primaires*, to which they go afterwards, they do not draw until they get into the first class, and thus about four years are passed without drawing.

On the 31st we went to inspect a girls' drawing school in the



Rue du Vieux Colombier, kept by Madame Thoret, called *une école libre*. It receives from the Paris municipality a subvention of 3,000 frs. annually, as well as the rent of the rooms, the cost of gas, and of a porter. For these considerations the school is bound to take 25 free students three days a week; actually there were 55 such students. Drawing only is taught on the days due to the State. There are lectures in perspective and anatomy; 160 girls were on the books, 128 present. On the days not due to the State painting is taught.

In the evening of the 31st we went to the municipal drawing school in the Place des Vosges, which was admitted to be one of the best of its class. Here the boys who have never drawn at all begin from flat examples of ornament, and as soon as they can shade a little they go to object drawing. The more advanced students study ten days from the living model, ten days from the antique, and ten days from ornament and plants. There is a course of anatomy and one of composition; on the books there were 376 inscribed, but the average attendance was said to be 95, and there were 76 present. There is a competition every month. Apprentices attending the schools have books (*livrets*), which are signed, for the satisfaction of their employers, at every attendance. I saw here a young Englishman, a wood-carver, who had formerly been a student at the West London School of Art. The master told me he was a good student. He seemed intelligent, and I asked him how the workmen of his trade in Paris would compare with those of a similar class among whom he had been in London. He said the Paris cabinetmaker or wood-carver had generally an advantage over the Englishman in being able to express or set out by drawing the work he was going to execute. He thought the Parisian more rapid, capable from skill or temperament of getting through more work in a given time, but working shorter hours or fewer days than the Englishman. In this school the lighting by gas was excellent; the casts were sharp and good and clean; the seats, too, were admirably contrived. There was in one room a contrivance for a double drawing-board of rough glass, which takes colours, as well as chalk and charcoal.

On leaving the school in the Place des Vosges we went to a similar one in the Rue Bréguet, but the students had left. The next morning, June 1, we went to the same building in the Place des Vosges and saw the drawing class of an elementary school, *école primaire*, and also an *école maternelle*. In the elementary school the children are from six to fourteen. Drawing is supposed to be done at once from plaster objects; actually flat examples are tolerated for a time, though forbidden by the rule. Here we were told that children were six years in the school before reaching the drawing-class. We saw the first-class rehearsing for a competition for a certificate called *de bonnes études*. They were sketching rapidly, from a plaster model of vine leaves. There are three divisions or classes; the middle one was drawing from plant forms in plaster, and the lowest from geometrical forms also in plaster. The examples were fixed against upright stands or poles, good casts, well lighted. There were 53 places in the room, and 50 boys were present. In the class of boys of six, geometrical drawing is done on slates. All the pupils of the two first classes are not in the drawing classes. The boys have one lesson of two hours and two lessons of one hour. The girls have one lesson of four hours (Thursday). We saw the *école maternelle* in the same building. The children were not at work, but we were shown their exercises done on the Froebel system.

I had heard that the schools of the Christian Brothers had been successful in their teaching of drawing, so I went to the head house in the Rue Oudinot to try and get permission to visit one of their schools, which are not under State or municipal control. I waited some time, but was not able to see any one in authority.

On Friday, June 2, we went to Lille, having written beforehand to the mayor. On our arrival at the hotel we found M. Marteau, architect of the town, awaiting us, and we went at once to the schools in order to see the classes which break up at seven. Here we saw elementary drawing, which we found interesting. The beginners had slates, about 30 inches long and squared out, fastened against the wall, and the boys had their examples alongside on small sheets of squared paper. Besides blackboards or slates fastened against the wall, there were others with a hinge at the top attached to a bar. The seated student had the lower edge of the slate on his knee. At first lines were done—horizontal, vertical, and diagonal; then angles, squares, circles, and curves, leading up to elaborate symmetrical patterns, done with white chalk, and without instrument or measuring. One very elaborate pattern was done by a boy eleven and a half years old, who had been taught drawing three or four months from the very beginning; another by a boy of twelve, who had been working six months; another, which seemed one of the best, was again by a boy of thirteen, who had learnt six months. We were told that about ten sittings of two hours each were required for the execution of the most elaborate patterns we saw. These are evidently kept as show pieces, for one of them still on the slate had been done in November, and we were then in the month of June. When a boy has gone through his course on the slates he does the same thing on paper, drawing his patterns first in crayon and then in ink.

For the whole course of blackboard and paper a good student requires one year. They work at drawing two hours a day on

five days of the week; the boys next go to a class where they draw from flat examples of figure and ornament, doing first eyes and noses and shaded heads, then charcoal *académies* after Jérôme, to learn how to put together a figure, and shaded figures by Barye. In working from the flat examples, they must do one drawing with hatching; they are allowed afterwards to shade with the stump.

There is a life class, where the nude model sits two hours on five days of the week. In this class-room we saw eleven students drawing from the life, and eight from casts. There is another living model sitting four hours daily (in costume) for a painting class. The students in painting begin by copying still life, plaster hands, and bits of silk. In the modelling-class the living model sits two hours a night for three weeks, and during the succeeding three weeks the students work from the antique. When we returned later in the evening to see the artisan classes working by gaslight we found three students modelling and two drawing from a cast of the *Venus of Melos*, others doing fragments, beginning with eyes, noses, &c. There were nine modelling stands. The modelling was pretty good, but the two drawings we saw in progress from the *Venus* were not so. Modelling and drawing go on concurrently. There was drawing of ornament from flat examples, also from casts (badly lighted), and from plants.

Some students were drawing ornament in indian ink after a course of stumping. We saw elaborate drawings of ornament being done from the flat, principally by decorators. There is a competition for colour, and we saw small bas-reliefs of figure subjects which had been produced in the modelling class. They were very good, and were said to have been executed between 8 a.m. and 6 p.m.

The next morning we were taken to an exhibition of industrial art, where a collection of the drawings done in the school was exhibited. Coloured designs and architectural drawings figured among them. There was nothing equal to the work done in our training-school, or in the *Ecole Nationale des Arts Décoratifs*, or the girls' school in the Rue de Seine in Paris. The jute industry flourishes at Lille, and we saw most beautiful stuffs made of it in the exhibition.

After visiting the town museum and the Préfecture, I returned to Paris in order to see a competition of working men, which took place the next day, Sunday, in the orangerie of the Luxembourg. I went to it when the time allowed was more than half over. I found 360 working men there between the ages of fifteen and thirty, who were allowed from 9 a.m. till 5 p.m. to make a shaded drawing or a model from a cast of ornament. A school having from ten to twenty-five students may send up three to this competition, and so on in proportion until one with a hundred and seventy to two hundred may send fourteen. In judging, the bad drawings are thrown out, and for every one considered admissible 5 frs. is given. The highest prize is 100 frs., and there are others of 75 frs., 50 frs., and 25 frs. The arrangements were admirable, and so was the behaviour of the students.

In this report I have stated briefly such facts as I could gather and take notes of in going through the schools when I had all the time to be using my eyes to form an opinion as to the quality of the work being done. I have but seldom expressed an opinion in this paper. In conclusion, I may say that we saw evidence of great activity in art education for the artisan class among the French. The State gives with a liberal hand, and the municipalities seem to vie with it. For the current year the Paris Municipality has voted 800,000 frs. for drawing schools. The instruction is quite free. Great efforts are being made to train better teachers, and here the higher instruction of the *Académie des Beaux-Arts*, with its fine traditions, had furnished a class for which we have no equivalent in England, and from which inspectors and other superior officers can be taken. In the schools pains and money are not spared to give to students fresh, sharp casts, kept clean, to draw from, and to place them in the best light both by day and night. These are matters of the first importance. The Department would do well to procure specimens of some of the fittings we saw. In one school where the lighting struck us as admirable, we ascertained that the lamps used to light the students' work cost 30 frs. each, those to light the model 150 frs., and those for the modellers, which can be moved up and down, 125 frs. Some of the seats and desks, too, might be procured. In all the best schools we found a desire to eliminate flat examples where they remain, and to let the students draw from objects. I ordered some of the plaster models most in use for beginners, and they are now in our schools. In these matters the position of the French resembles our own; they are obliged in some cases to tolerate examples known to be bad for want of better. There is in use a substitute for the blackboard made of rough glass; it takes washes of colour as well as charcoal and white chalk. The cost is 200 frs.

Messrs. J. Boyd & Sons, of Paisley and London, inform us that they have just completed fixing two new boilers for the Botanic Gardens at Glasnevin, county Dublin, which will be in operation during the month, and will abate some of the evils that have affected the gardens, and which were referred to in a "Note" in last week's *Architect*.



## NOTES AND COMMENTS.

A COMMITTEE has been formed in Stockholm, with the Prince Royal as president, to make arrangements for a Scandinavian Industrial Exhibition, to be held in Stockholm in the summer of 1884. It is proposed to erect the building on a plain, called Ladugardsgärdet, in the outskirts of the town. A temporary railway will be laid down for traffic and passengers, whilst steam-launches will be employed for conveying the latter by water to within a few minutes' walk of the exhibition. An elevated and open site will be chosen for the building, and the surrounding grounds are to be tastefully laid out with turf, flowers, and fountains. The total disbursements in connection with the exhibition, after deducting the value of the materials of the building, are estimated at 1,166,000 kronor, or 64,777*l.*; the receipts at 366,000 kronor, or 20,322*l.* An area of 314,250 square feet will be allotted for the exhibition building.

THE Dean of CHESTER has resolved to complete the restoration of his cathedral, which has been already almost transformed by alterations. It is necessary to appeal for funds for the works, which are estimated to cost at least 15,000*l.*, and will be directed by Mr. BLOMFIELD. The Cathedral Commissioners say it is clear, from various records, that the cathedral establishment of Chester was intended to be a large and important one, and to have a position of high distinction and wide influence; and its first Charter of Dotation (33 HENRY VIII., August 5, 1541) endowed it with ample means to support such a position. But its property was greatly diminished by the alienation under Queen ELIZABETH in 1582 of a large portion of its estates to laymen, advantage being taken of the omission of the word "Cestriensis" in the original charter. From that time to the present the cathedral has been struggling with difficulties. It has no special fabric fund though its need is very urgent.

THE appointment of Major COLE, R.E. (a son of the late Sir HENRY COLE), to be Curator of Ancient Monuments in India, will do much for the preservation of Eastern architecture. From his first report it is evident that, if some of the buildings are to be saved, the custody of them must be undertaken by the Government. Major COLE reports that "the great pillared Diwan-i-Am at Delhi, with its fine marble mosaic canopy and throne, is used as a canteen, and on the right of the throne is a bar for serving out liquor! To the left of the throne is an enclosure of bamboo screen-work, in which NUBBI BUX keeps a soldiers' coffee shop. Above and at the back of the throne is a small open apartment, the walls of which are faced with the celebrated black marble mosaic work; but this, as well as the inlaid patterns on the throne, has been villainously repaired in coloured plaster." It is fortunate for the buildings that the authorities in India rarely have opportunities to manifest their loyalty. According to Major COLE, another palace, "the Diwan-i-Khas, has been disgracefully treated. To prepare for a ball given in honour of the Prince of WALES, the moulded fretwork of the wooden ceiling in the centre of the building was repainted in black and gold and red, instead of white and gold, the original colours, and the central rose was converted into a sort of starved star-fish." A good many instances of similar treatment of Eastern art is recorded by Mr. FER-GUSSON.

THE opening out of the great Roman bath in the city of Bath is due to the energy of Mr. DAVIS, the city architect; and if it were not for his enthusiasm, the excavations must have been suspended soon after they were commenced. It is to be regretted that some time ago the Corporation did not estimate Mr. DAVIS's services at more than one-half their real value. But now that the work has been accomplished a better spirit prevails in Bath, and Mr. DAVIS has again asked the Corporation to consider his claim. It was admitted by some of the members that Mr. DAVIS had worked early and late to secure the success of the excavations, and accordingly the subject has been referred to the Baths Committee, who, we trust, will be appreciative of what has been done.

A MEETING has been held in York to organise a committee for the publication of the history of Yorkshire. Already the project has secured the support of a great many archæologist

and topographers. It is proposed to send circulars to all the clergy and landowners, with a request to fill up certain forms containing questions. The returns will then be arranged and published in the form that is considered most suitable. The expense will, however, be great, and may amount to at least 2,000*l.* for each wapentake. It is understood that the gentry of Yorkshire are willing to give all the information that may be found in their houses, and to contribute towards the cost. At present opinion is in favour of a series of volumes, giving the history of each district separately, rather than of a few colossal volumes like those which give the histories of some other counties.

THE fire at the private lunatic asylum in Southall ought to be a sufficient warning to the authorities of the dangers of those institutions. It is well known that throughout Great Britain nearly all the private asylums are no more than private houses, which have been utilised for a purpose for which they were not designed. Many of them are old-fashioned, and consequently possess fewer conveniences than are found in modern houses. In them a great number of people are often lodged who are not likely to be self-possessed in the case of a fire or other danger. It is a remarkable fact that although the Commissioners of Lunacy are supposed to examine the condition of private asylums once a year at least, they are not accompanied in their visitations by an architect, who might point out the defects of the buildings. At Southall there were no appliances to be used in case of fire, and there was an insufficient supply of water. The consequences are known, and the owner, his servants, and some of the inmates have lost their lives. In the same district there are many private asylums in which the risks are even greater. Is it not time that adequate care should be taken to protect the unfortunate occupants of such buildings?

THE beauties that surround Torquay are sufficient to inspire an artist, and it is not surprising that a good many painters have lived there. Among others are the following Devonshire men: CHARLES EDMUND CROFT, of Torquay, painter in oils and water-colours, born at Plymouth, 1838; SIDNEY S. MORRISH, Clare House, Torquay, born at Exeter, a frequent exhibitor at the Royal Academy; JOHN SALTER, born at North Tawton in 1825, settled in Torquay, portrait and landscape painter; CHARLES WAY, sen., born at Dartmouth in 1805, settled at Torquay 1826; and WILLIAM COSSENS WAY, born at Torquay, 1838. But at present Torquay does not appear to be so attractive to painters as some other parts of Devonshire, and views of the scenery are rarely seen in exhibitions.

AT a time when attention is given to the principal work of the late ALFRED STEVENS, it may be noted that the *Magazine of Art* for the present month contains several excellent engravings of his fine sculpture in stone and wood at Dorchester House. The building was remodelled by the late Mr. VULLIAMY, and the great staircase has been effectively planned. STEVENS's work would, however, give value to a less splendid mansion. The mantelpiece is supported by a pair of figures that will not suffer if they are compared with the *Slaves* of MICHAEL ANGELO. The sculptor knew that in the Park Lane house he had a patron who was able to appreciate his work, and consequently we there see him at his best.

SOME of the Spanish cities are adopting the system of large houses divided into flats. In Malaga many buildings of the kind are in progress, and, in consequence, the narrow but picturesque streets which were suggestive of the Moors have been removed. But with Parisian buildings the old indifference to cleanliness remains. The English consul is compelled to say that it would be difficult to discover a town of the size of Malaga where sewerage is so much neglected, or the streets are kept in so uncleanly a state. The place is saved from pestilence by the salubrity of the climate, which is unsurpassed in Europe. Malaga is well adapted to become a winter abode for invalids; but English visitors after a short time are compelled to fly from it owing to the disregard of sanitary regulations, and as yet no one has had sufficient enterprise to erect an hotel outside the city.









BUSINESS PREMISES, WOODHOUSE LANE, LEEDS.

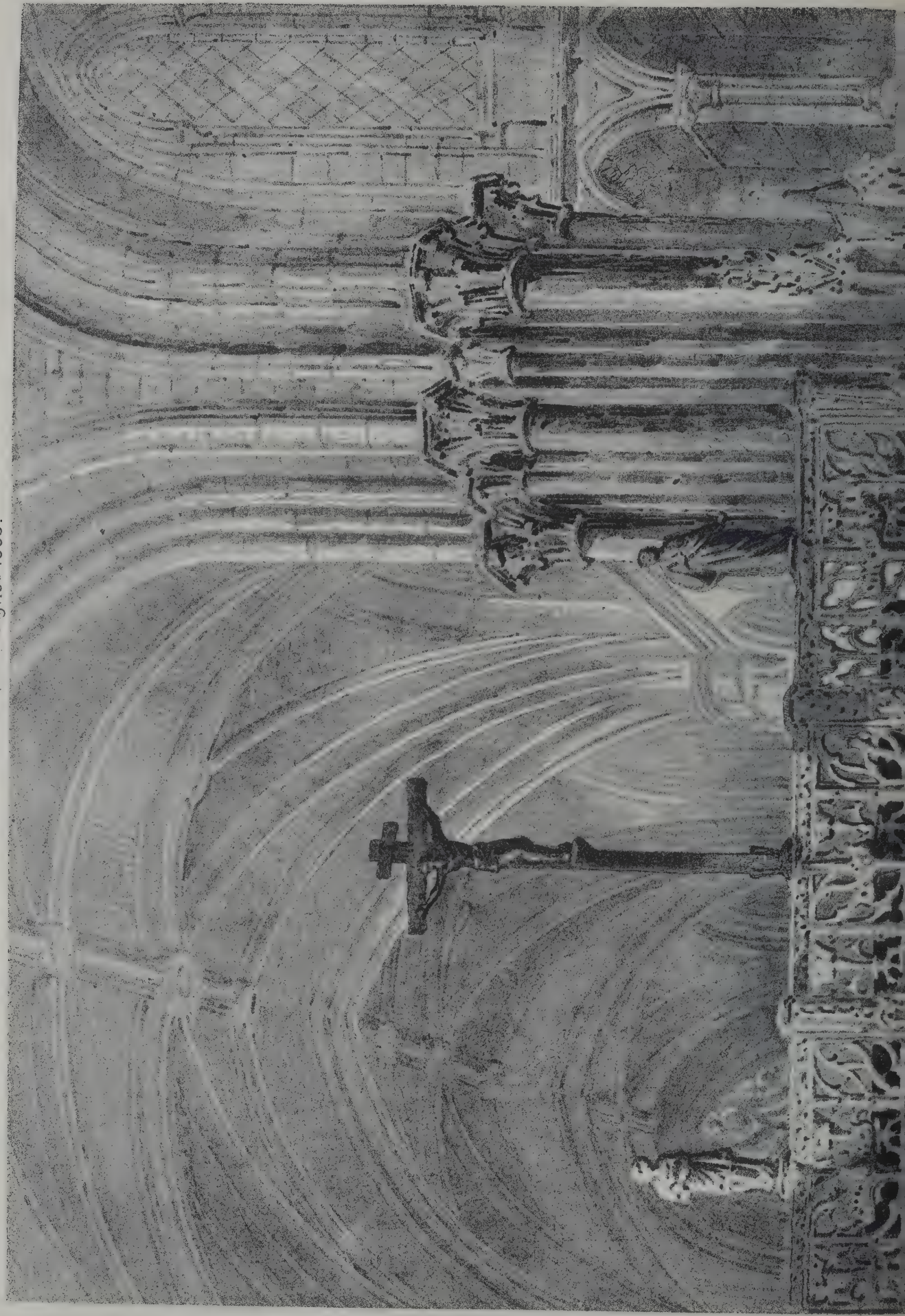
E. BIRCHALL, F.R.I.B.A. } ARCHITECTS.  
W. A. HOBSON. }







The Architect. Aug. 18<sup>th</sup> 1883.







CHURCH OF ST. MADELEINE, TROYES.

FROM A WATER COLOR DRAWING.

By F. P. BARRAUD.

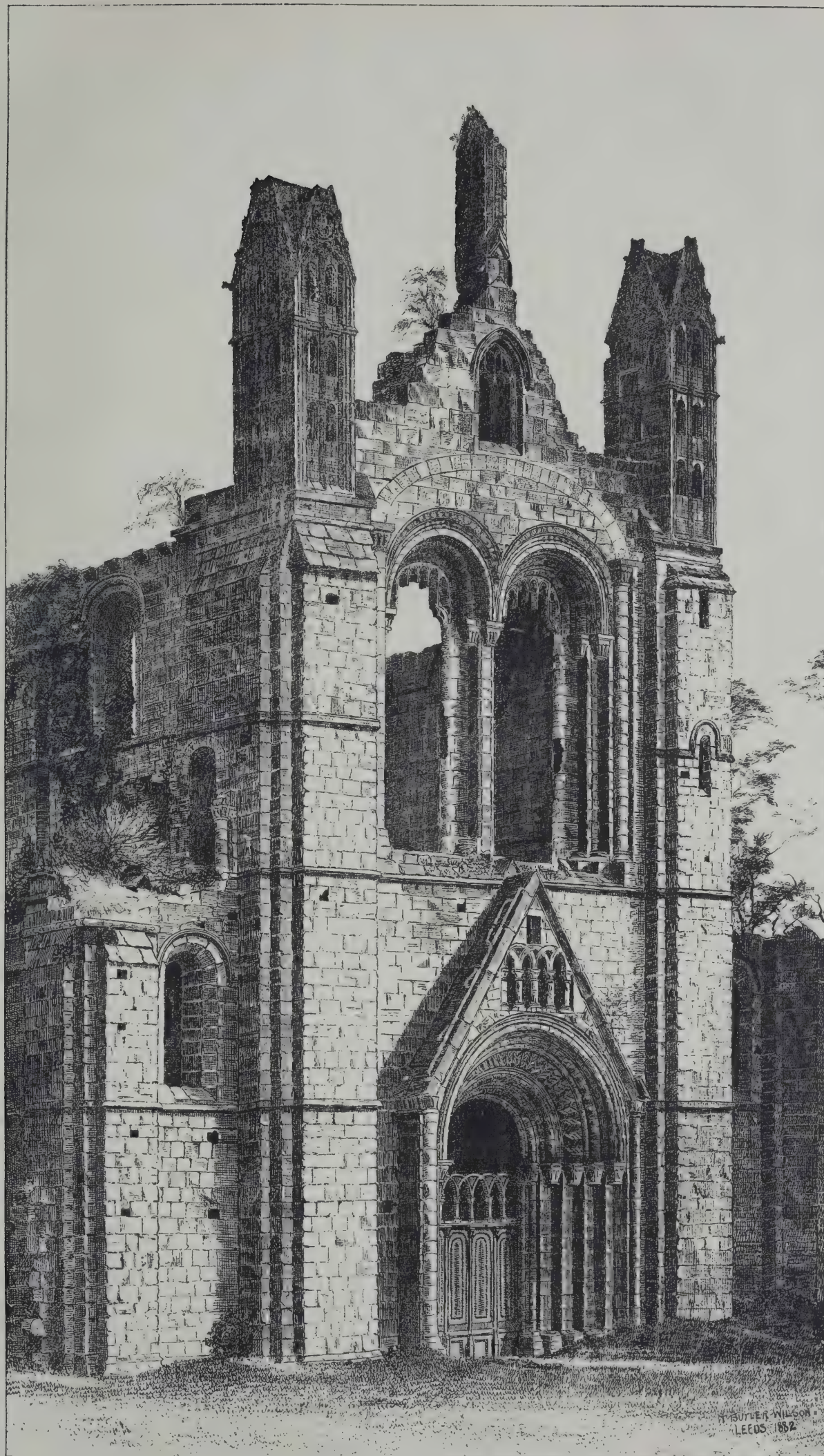
F. P. Barraud

"INK- PHOTO," SERAGUE & CO, LONDON









KIRSTALL ABBEY, WEST FRONT.

Drawn by T. BUTLER WILSON.









EDW<sup>d</sup>. J. DODGSHUN. ARCHT.  
LEEDS.

Design for All Saints' Church. Ipswich.  
South West View.







## ILLUSTRATIONS.

INTERIOR OF THE CHURCH OF ST. MADELEINE, TROYES.

WE publish this week a reproduction of a water-colour drawing by Mr. BARRAUD, which was exhibited this year at the Royal Academy. Architects will welcome the accession of Mr. BARRAUD among architectural artists. They have long known him as an artist in stained glass and other kinds of decoration. From Mr. BARRAUD's acquaintance with Mediæval buildings, and skill as a draughtsman and colourist, excellent representations of architectural work may be anticipated.

Troyes is one of the few French towns which has not undergone a complete metamorphosis, and is in consequence a favourite sketching-ground. The church of St. Madeleine has been altered, but much is left to delight the artist, and especially the beautiful screen shown in the illustration. It was carved by JOHN GUALDO, an Italian, in the early part of the sixteenth century. The sculptor was buried in front of his masterpiece.

NEW PREMISES, WOODHOUSE LANE, LEEDS.

THIS building has been recently erected by Mr. RICHARD WOOD on the site of his old premises. On the ground floor there is a large shop, with exit at back to slaughter-house, yard, &c.; an entrance from the street leads into the hall, with doors opening into dining-room and back part of house. A staircase in the entrance hall gives access to sitting-rooms and bedrooms on the first and second floors. The shop has been fitted with all the most recent improvements. Wrought-iron tram lines, suspended from the joists on first floor, run all round the shop, and to the slaughter-house. These have been specially designed by Mr. WOOD, and so arranged with junctions that meat can be conveyed to any part of the shop without being taken off the lines. The walls have a marble dado 5 feet high all round, with marble slabs supported on wrought-iron frames; above the dado is tiled with MINTON'S white glazed tiles. The floor is tiled, and the ceiling is panelled in pitch pine stained and varnished. The office screen and rest of woodwork in shop is in pitch pine stained and varnished. In the shop-front there is a large wrought-iron sash and frame which can be lowered into the basement by a mechanical arrangement. Ventilation is secured by an open grille over shop window, and flues have been left in the wall for carrying away the vitiated air. The materials for the front are best pressed bricks and stone dressings. HAYWARD'S patent pavement lights have been used for lighting the cellars. The contractor for the whole of the works was Mr. JAMES WOOD; the ironwork and fittings by Mr. E. OLDROYD, engineer. The architects were Mr. E. BIRCHALL, F.R.I.B.A., and Mr. W. A. HOBSON, of Leeds.

DESIGN FOR CHURCH OF ALL SAINTS, IPSWICH.

THE design reproduced was submitted by Mr. EDWARD J. DODGSHUN, of Leeds, in the recent competition. The materials proposed to be used were local red bricks with Bath stone dressings. The roof timbers would be of pitch pine. The plan was arranged to accommodate 800 worshippers.

WEST FRONT, KIRKSTALL ABBEY.

THIS illustration is from a drawing by Mr. J. B. WILSON, of Leeds. An excellent description of the abbey by Mr. J. W. CONNOR, F.R.I.B.A., was lately published in *The Architect*.

## THE ELECTRIC LIGHT AT THE SOUTH KENSINGTON MUSEUM.

THE annual report of Lieut.-Colonel Festing, R.E., supplies the following information on the employment of the electric light at the Museum.

There not being at present space available for more steam-power, it has not been possible to extend the electric lighting of the Museum, except to the extent of putting 18 more incandescent lamps in the temporary Art Library. The apparatus has all worked well, and there has been no accident of any kind. The cost of 32 arc lamps for the year, including fuel, oil, &c., for the engine, carbons, and wages has been 185*l.*, or 2*2* pence per lamp per hour, the same figure as given in my last report.

The saving in gas as compared with the average consumption of the last four years before the electric light was introduced has been at the present price of gas, 1,007*l.* A portion of this saving is probably due to increased care in the supervision of the gas; but the bulk must be certainly put down to the introduction of the electric light, for besides the direct saving resulting from difference of cost per hour of the electric light and gas, which I estimate at 85*8*%, a further saving results from the fact that the electric light is started simultaneously exactly at the time it is wanted, whereas it takes some time to light all the gas, and therefore the lighting has to be commenced before it is actually wanted. I find, by dividing the total annual consumption in the Museum by the hourly consumption taken by the meters, that the average number of hours that the gas is lighted in the year is 700. The electric light was at work for 627 hours last year; there is therefore a further saving of 73 hours of the gas displaced by the electric light, which amounts to 99*l.*, which brings the total saving in gas to 957*l.*; deducting the total cost of the electric light (185*l.*), the net saving is 772*l.* per annum, or about 41 per cent. on the outlay, which has been 1,900*l.*

In estimates of the cost of electric lighting we frequently see such sums as 10, 15, or even 20 per cent. per annum put down for "depreciation of plant." Our experience here affords no confirmation for such exorbitant figures.

One of the dynamo electric machines has been at work now for 34 months; at the end of 28 months we had a new set of brushes, costing 8*s.*, or at the rate of 3*s.* 5*d.* per annum; at the end of 32 months we had a new set of commutator plates costing 15*s.*, or say 5*s.* 8*d.* per annum, a total of 9*s.* 1*d.* per annum, or  $\frac{1}{6}$  per cent. per annum on the cost. The other machine has so far cost nothing for repairs, and I am unable to detect any loss of efficiency in either machine. Nothing has been spent on the repair of the lamps or other parts of the electric apparatus. On the steam engine, which we have had at work for about 2½ years, 5*l.* 10*s.* has been spent on new furnace bars, and I believe the engine and boiler to be substantially as good as ever.

The importance of introducing electric light into the art schools has been urged upon me by the director for art and the principal of the schools. So much inconvenience is felt from the heat and fumes of the gas, that the substitution of electric light would be an enormous benefit. I have tried several experiments, but one great difficulty has been the want of motive power. The only power available is that of the gas engine; but this is required for lighting the library on the nights when it is open, and it would not do to introduce electric light into the art schools on some nights only, as the continuity of the work would be destroyed. Through the courtesy of Messrs. Sellon & Volckmar, however, I have been able lately to try some of their storage batteries. These can be charged by means of the gas engine at any time, and are available for the supply of electric current when it is wanted. They are best fitted for working incandescent lights, but the colour of these is not much better than that of gas; it is therefore very desirable to have an arc light, but there are difficulties in getting one to work properly with storage batteries. I have now, however, obtained a Pilsen lamp, which so far appears to answer well, and therefore, if we find that the storage batteries themselves work satisfactorily, I think we may consider that the difficulty is solved, and that we may be able to light at all events the most important rooms in the art schools by electric light.

## KENT ARCHÆOLOGICAL ASSOCIATION.

A MEETING of the Kent Archæological Association was lately held in Ashford, when some of the buildings in the neighbourhood possessing archæological interest were visited. The annual report was read by the secretary, the Rev. Canon Scott-Robertson. It stated that the condition of the Society was satisfactory. The council had undertaken the task of obtaining particulars of all the church plate in Kent. The council had already received particulars of 220 sets of communion plate. Among these were found no less than fifty communion cups, and one curious stoup or flagon, made in the reign of Queen Elizabeth, and which had been in use for more than three centuries. One tall, covered cup of great beauty, made by the renowned silver-smith of Nuremberg was amongst those still in use, and there were others of similar character and beauty, but of English workmanship. Instances had been discovered of at least three gifts of plate to parishes during the period of the Commonwealth. No stirring discoveries had been made during the past year, but a well-preserved hoard of 1,850 Roman coins, chiefly small brass, of the reign of Maxentius and Constans, had been discovered in Cobham Park, not far from the Earl of Darnley's house. These coins were being classified by Mr. Roach Smith.

After a paper had been read on the history of the Ashford Grammar School, the members visited Hinxhill, which was formerly called Hengeytele.

A paper on the church was read by the rector. The building had, he said, no pretension to architectural beauty or to archæo-



logical attraction. Its tower and earliest features are Early English, the walls being chiefly of Kentish rag. It was probably built early in the thirteenth century, and is dedicated, like many other churches in the neighbourhood, to St. Mary. It had originally only a nave and a chancel, but the very narrow north aisle was added in the fourteenth century. At a more recent period still, probably early in the seventeenth century, the chancel or chapel, as it was called by Sir Stephen Glynne, at the east end of the north aisle, was made, the original north wall having been clumsily cut through, and the outside wall of the narrow aisle extended to its present length. A large and ugly square three-light window in the east wall of that chancel has recently been filled in, and a stained-glass lancet placed in its stead, the glass having been put in by the late Mr. Thomas Startup, of Ashford. A small aumbry in that chancel was probably removed from this chancel to make way for the Edolph monument. The window in the north wall, which corresponds with the two light decorated windows in the south wall of this chancel, was probably taken out of the original north wall and inserted in its present position, the upper part, of which there are external traces, having been cut off for the want of space. The arcade of the nave consists of three pointed arches upon circular columns, with octagonal capitals. The arch, which divided the nave from the chancel, probably fell or became unsafe, and was removed in the year 1633, tie beams having been inserted for the support of the outer wall. The tower, at the west end of the church, is surmounted with a single spire, and it is recorded that, "on the 23rd of December, 1796, about six o'clock in the evening, during a violent thunderstorm, the steeple was struck by the lightning, the upper part of it being burnt down, and the rest of it considerably damaged; but it was wholly rebuilt and repaired in the following year." An unsightly gallery, which hid the upper part of the tower arch, has been recently taken down, sittings equal in number to those which were sacrificed having been provided in other parts of the church. This tower arch is built of chalk, as are also the jambs of all, or most of, the earlier windows. The remarkable door of the vestry—the inner door—is probably contemporaneous with the church, and, if so, must have been the door of the original south entrance, now only seen in the external recess of the wall. The font—a square bowl on a cylindrical stem and four detached legs, on a square plinth—has lately been removed from the north-west corner of the narrow aisle to its present more suitable position. The reading-desk and pulpit were constructed out of a handsome oak screen, which at one time parted the two chancels. Here is one small brass to the memory of Robert Gateley, dated 1518. A beautiful monument, with kneeling effigies (at the north of the communion-table), was erected by his widow, in 1632, to the memory of Robert Edolph, Esquire, who died in the previous year.

The building that was next visited was the old church at Brook Hill. Canon Scott-Robertson called attention to the Norman tower. It is three stages in height, and each stage is larger than the one above it, so that the tower tapers as it ascends. Its base is very large. The length from east to west (about 27 feet) exceeds the length of the chancel by nearly 6 feet, and falls little short of the length of the nave, which is only about 9 feet longer than the tower. At the south-east corner there is a remarkable turret-stair. Externally the turret resembles a large flat buttress, of six stages, tapering, each narrower than the one below it. Three very small round-beaded windows light the newel staircase. It resembles those which Prior Ernulf built, and probably is of the same period—viz. A.D. 1100. In the second stage of the tower is a chamber, from which three open Norman arches, like windows, in its east wall, gave a view of the high altar and of the body of the church. The central opening was blocked up at an early period, and upon the plastered surface of the western face of the blocking masonry fresco was painted in distemper. It represents Our Lord in glory. It is generally supposed that this was a priest's chamber. The presence of an altar in so unusual a position may suggest that it was at one time occupied by a priest, who had taken upon him vows of seclusion as an anchorite, after which he never left this chamber. Aloft, in the upper stage of the tower, are three bells, all founded by Joseph Hatch. The biggest bears this inscription: "Joseph Hatch made me, 1612." The tower opens to the nave by a lofty Norman arch 15 feet wide; it is adorned with the cable moulding. The nave has, high up in its south wall, two lofty Norman windows of the simplest design. The walls of the nave were painted, probably in the thirteenth century, with a series of frescoes in distemper. On the south wall there was a double series of subjects in two tiers, each tier containing ten arches, having the figures depicted in red. They have all been whitewashed over, but the wash has now been scraped off, and confused traces of the subjects are alone left to meet the eye. On the north wall the paintings are fainter still. Over them, in Elizabethan or Jacobean times, texts were painted. We can still detect the words: "Be ye doers of the Word, and not hearers only, deceiving your own selves;" and "To do good and to communicate forget not," &c. A very handsome rood-screen was inserted in the Norman chancel arch about 1502-1518. Over the Norman chancel arch the decalogue and the Royal arms now stand. Formerly there was on or before the rood-loft a light called "The Cross Light." He found mention in this church likewise of the "Light of

St. Nicholas" and of "The Torch Light." Thomas Churchman, who bequeathed small sums of money to these lights in 1525, directed that during twenty years after his death an obit should be kept in this church after the following manner: Every year two bushels of wheat were to be baked, and so given in bread to the poor; and two bushels of malt were to be brewed, and given away in ale, after one mass and one dirge had been sung on the anniversary of his death. Entering the small chancel, they saw that its three walls had been entirely covered with fresco painting, in circular panels or medallions. The method of the mural decoration is remarkable, and, so far as Kentish churches are concerned, it is unique.

Mr. Furley said that the manor-house, the church, and the mill were in close contiguity—each within a few yards of the other. It was the custom of the lord of the manor to build a mill for the convenience of his tenants. It was supposed that Wye was built two miles from where the present Wye now stands, and that the whole of the valley was covered with water, upon the recession of which the town was brought down the hill to its present site. Here in Brook was a property belonging to the Chapter of Canterbury, as complete as any that could be found; the right of pannage, or sending hogs to feed on the acorns in the denes of the Weald, being, among other rights, connected with it in the eighth and ninth centuries.

The church of All Saints, Boughton Aluph, was also described by Canon Scott-Robertson. Ninety years ago, he said, the chancel of this church was entirely blocked off from the nave by huge folding doors. The nave was filled with tall pews until a few years ago, when the present incumbent got it resealed. There was a church here when the Domesday survey was taken, but of it we can find only one fragment now remaining—the base of the central column of a short arcade between the high chancel and the north chancel. That Norman edifice was improved and restored during the thirteenth century. Of the Early English restoration we can now see the piscina-niche wrought in chalk, with its straight-sided pointed arch; the sedilia, with well-moulded hood, also in chalk; and probably the two north-western windows of the north chancel. Whether the strangely-large square turret at the south-east angle of the central tower was the Early English tower of the former church is a question which deserves attention. It is certainly not coeval with the central tower. This turret is of two courses, and the upper course may probably have been an addition. Built of flint, and square on the exterior, the turret is now lined with chalk blocks internally, and they are so cut as to make the interior of the turret circular. In the fourteenth century, it would seem, the church was greatly enlarged and richly adorned with stained glass; being made cruciform in plan. The arches of the nave arcades are very lofty; their upper members are formed of chalk, their octagonal shafts are graceful, and the loftiness of the arches beneath the central tower surprises us. They cannot be less than 30 feet in height from floor to apex. The slenderness of the four octagonal piers which support the tower strikes modern architects with dismay, and fills them with admiration for the bold genius who safely erected such a tower upon such piers. The heraldic devices in the west window threw some light upon the enlargement of the church. On the north (or right hand) side of that window is the heraldic coat of the Burghersh family (ancestors of Lady Le Despencer). That family possessed the manor during the reigns of Edward I., II., III., and Bartholomew Lord Burghersh sold it towards the end of the reign of Edward III., somewhere about 1368.

At the evening meeting, papers were read by Mr. Furley on "The Early History of Ashford," by the Rev. Canon Jenkins on "The Connection of Heraldry with Architecture and Art," and by Mr. Loftus Brock on "The Characteristics of Kentish Churches."

The second day's proceedings began with a visit to the parish church of Ashford. The Rev. A. J. Pearman said that the building was a striking object, whether viewed from within or without. Externally, its situation on rising ground, and its lofty tower, rendered it a conspicuous feature in the landscape; while internally its size, with the number and massiveness of its columns, placed it in the foremost rank among the sacred edifices of the county. No one who took his stand at the font, and then slowly advanced up the central space towards the chancel, could fail to be impressed by the prospect before him as arch after arch came gradually into view. The church is dedicated to the Blessed Virgin, whose figure may be seen in a niche on the exterior, under the great east window. It is cruciform, consisting of a nave with north and south aisles, transepts, and three chancels, surmounted at the point of intersection by a steeple, in which are a clock, eight bells, and a set of musical chimes. The building will accommodate 1,700 worshippers. Domesday Book records that there was at that time at "Essetisford" a church and a priest. Of that fabric nothing remains. Probably in the reign of Henry III. (1216-72) the existing church was erected. There was evidently a great deal of reconstruction either in the fourteenth or earlier part of the fifteenth century. Accidents were continually occurring to churches in the middle ages, and it is not at all unlikely that a fire was the cause of damage in this case. About 1475 the church assumed the appearance which substantially it now presents. Sir John Fogge, of Ripton, as the inscription on



his tomb testifies, "renovated it at his own cost," "as well as the bell tower, which he built from the foundation." There are several interesting works in the church. Among these is a brass in the high chancel, which Weever says "presenteth the greatest glory and antiquity to this church." It is a memorial of the Countess of Athol who died in 1375. The tomb of Sir John Fogge is handsome, but the brass effigies of himself and his two wives have long been removed. His tilting helmet is hung in the Repton Chapel, and weighs about 24 lbs. The rood-staircase still remains in the south transept. During the Great Rebellion the old altar was pulled down by the then churchwardens, who were so proud of their exploit that they caused their names, "Joy Star," and "Wm. Wasley," to be cut in stone and let into the east wall as a memorial. This remained until the year 1695, when the stone was taken down and the inscription picked out with indignation by Mr. Marsh, an attorney of the town, with others; but a portion of it, with some of the letters quite legible, lay just outside the chancel door until quite recently. Of the old stained glass, which once abounded in the church, the last fragments were in the great west window, taken down in 1861.

Eastwell Church was described by the Rev. G. E. Gwynne. It was probably erected in the fourteenth century. It has two equal aisles, with a tower at the west end of the north. The church was restored some years ago, but too soon, according to Sir Stephen Glynne, to be entirely satisfactory. On the north of the church is a sepulchral arch, under which is an ancient tomb, supposed to contain the remains of the last of the Plantagenets. Tradition relates that he was the natural son of Richard III., who fled after the battle of Bosworth, August 23, 1485, and eventually came down to Eastwell, and worked as a bricklayer under Sir Thomas Moyle, who permitted him to erect a cottage near the mansion, where he lived for about four years before his death. This statement they would find partly confirmed by an entry in the parish register of burials, commencing in the year 1538: "Anno Domini, 1550: Rychard Plantagenet was buried ye xii. daye of Decembre Anno di Supra." There is a well still called after Plantagenet, and an ancient-looking cottage called "Plantagenet House."

Westwell Church, which is now being restored, was described by Canon Scott-Robertson. The walls he believed to belong to the Early English period. The windows, a piscina, and sedilia were added in the fourteenth century, but it was no larger now than it was in 1298, when Archbishop Winchelsea held an ordination in it. At that time the walls were probably rich in colouring, and traces of mural painting may still be discerned. The general effect achieved by the Early English architect of this church is gracefulness and lightness, and the efforts he made to obtain those objects, combined by a groined chancel roof, betrayed the genius of a master. Mr. Loftus Brock said that although the church was Early English, the tower was of an older date.

At Charing, a paper on the church was read by Mr. J. Sayer. The first mention of the edifice occurs in the taxation of Pope Nicholas, 1291, and, subsequently, the parish seems to have been rather over-furnished with churches, for the Lambeth registers show presentations to the church of Pette, to the chantry chapel at Burleigh, and the Norman chapel at Newland. Mr. Sayer succinctly went through the architecture of the edifice, and especially drew attention to the tower, with its singularly well-proportioned arch opening into the nave. For the fine roof of distinctive Elizabethan character they were indebted to the great fire which happened in the year 1590, and of which the following note was made at the time by Mr. Sayer's ancestor, Robert Honywood, of Pett. "Memo.—The parish church of Charing was burnt upon Tuesday, the 4th of Aug. 1590, and the bells in the steeple melted with the extremity of the fire; nothing of the church was left but the bare walls except the floor over the porch and the floor over the turret, where the weathercock doth stand. The fire chanced by means of a birding piece discharged by one Mr. Dios, which fired in the shingels, the day being extreme hot, and the shingels very hot, and the same shingels very dry." Weever states that the "birding piece" was discharged at a pigeon. Bishop Tufnell, under whose auspices the church was restored a few years ago, gave a tuneful peal of bells for the tower, previous to which there had been only one bell, a circumstance which gave rise to the distich, "Dirty Charing lies in a hole, it has but one bell, and that was stole." A bit of evil speaking, Mr. Sayer said, not even founded on fact, as the one bell was, no doubt, cast out of the material of the four bells melted by the fire, and Charing lies on the slope of the Chart hills.

Mr. Sayer afterwards described the Archbishop's palace and manor-house.

Little Chart, the Norman chapel at Newland, and Little Chart church with its Darell aisle, filled with numerous and beautiful monuments, were also visited. Next Canon Scott-Robertson described the Early English church of St. Nicholas at Pluckley, with another old family chancel, that of the Derings, and the handsome Tudor and Jacobean screens.

**A Benefactor** of the Wigan Infirmary has offered to erect and furnish a wing at a cost of 3,000*l.* in connection with the present buildings.

## THE NOTTINGHAM MUNICIPAL BUILDINGS COMPETITION.

**T**HE Public Offices Committee have presented the following report to the Town Council: The Public Offices Committee report that in pursuance of resolutions passed on July 13, 1882, they proceeded to take such steps as appeared desirable to enable them to obtain the most appropriate designs for the new offices required for the public business of the town. Your committee in the first instance decided to have two competitions, the first to be confined to general plan and organisation, the second to be open only to those who succeeded in getting a place in the first competition; but such second competition to be for the building complete. Your committee resolved that no premiums should be given to the successful competitors under the first competition; but that in the second competition the architect whose designs should appear to the Corporation to be in all respects the best should be awarded and paid a premium of 300*l.*; that the architect whose designs were selected as second best should be paid a premium of 200*l.*; and that the architect whose designs should be selected as third best should receive a premium of 100*l.* It was also arranged that the premium should merge in the commission of the author of the premiated design who should be employed to carry out the work. It was made a condition of the competition that the premiated designs should become and remain the property of the Corporation. Your committee reserved to themselves the right to employ quantitative surveyors or assessors to determine whether the probable costs of the building would exceed that which the competitors gave in their estimates. All designs were to be sent in under motto; not more than eight designs were to be selected under the first competition; and those who were successful in obtaining a place therein were to be invited to enter upon the second competition. In the second competition an architect was to be appointed from three architects of standing and eminence to be named by the Corporation, and the report of such referee architect was to be submitted to your committee. Your committee endeavoured to impress upon the competitors that the intention of the Corporation was not to build a town-hall, but business premises, in which convenience of arrangement would take precedence of architectural effect, and that economy would be a primary consideration. Your committee then proceeded to obtain from the principal officials in each department, mentioned in their report of July 13, 1882, a statement of the number and size of the rooms required for the efficient but economical working of their departments. Your committee next instructed Mr. M. Ogle Tarbotton, the Consulting Engineer to the Corporation, to prepare a specification for the guidance of architects who intended to send in competitive designs. In pursuance of such instructions, Mr. Tarbotton drew up an admirable and very clear statement by way of "Instructions to Architects." For the information of the town council a copy thereof is printed in the appendix to this report. Your committee do not hold themselves bound by the statement of the approximate areas which are there mentioned to be required for each department; but on a review of the total requirements of the various departments necessarily concentrated in the new municipal buildings, and in view also of the rapid development of the town, your committee are of opinion that the total area is not excessive, and perhaps not more than a fair provision for the future. Your committee then advertised for competition drawings, and directed them to be delivered to the Town Clerk by the middle of March last. In response to the advertisement 117 designs were sent in. They were hung in the Exchange Buildings. They were most carefully inspected by your committee, and very great pains were taken to arrive at the selection of the eight designs for the second competition. After careful consideration your committee were of opinion that, considering the terms of the competition, and the objects of the council, the following were the eight that should be thus selected: "Childe Harold," "Esto," "J'espère," "Light," "Might, Light, and Right," "Order," "Simplex," "Suitability." The envelopes containing the names of the authors were opened, and were found to be "Childe Harold," F. H. Oldham, 23 John Dalton Street, Manchester; "Esto," J. W. Hickson, 6 Exchange Street, Manchester; "J'espère," Messrs. Truman & Pratt, Nottingham; "Light," G. Corson, 35 Cookridge Street, Leeds; "Might, Light, and Right," Messrs. Verity & Hunt, 27 Regent Street, London; "Order," Y. Thomason, Bennett's Hill, Birmingham; "Simplex," W. Harvey, 7 Whitehall Place, London; "Suitability," C. Bell, 9 New Broad Street, London. Your committee, therefore, invited these gentlemen to send in final designs for the building, under the terms of the second competition. Seven sets only were sent in under the new mottoes "Esperance," "Fiat," "Queen Bess," "Sepia," "Speedwell," "Strive to Thrive," "Wisdom, Strength, and Beauty." In pursuance of the terms of the competition, your committee named the following three architects, one of whom was to be selected by the architects themselves, as the final judge of the merits of the competitive drawings: Mr. Charles Barry, Westminster Chambers, Victoria Street, London; Mr. Henry Currey, 37 Norfolk Street, Strand, London; Mr. Alfred Waterhouse, 20 New Cavendish Street, Portland Place, London. A meeting was held in London,



when a majority of the competitors selected Mr. Alfred Waterhouse. The second set of drawings were delivered on June 30, and Mr. Waterhouse proceeded at once to make a most thorough and exhaustive examination of them. By his award he has bracketed two of the designs, namely, those under the motto of "Wisdom, Strength, and Beauty," and "Queen Bess," for first place, putting "Sepia" in third place. The report of Mr. Waterhouse will be found in the appendix. From that report it will be seen that "Wisdom, Strength, and Beauty" was selected for its admirable plan and its economical advantages, whilst "Queen Bess" was selected mainly for the general beauty of its external design. Your committee opened the envelopes containing the names and addresses of the competitors in the second competition, when it was found that the three successful competitors were "Wisdom, Strength, and Beauty," Messrs. Verity & Hunt; "Queen Bess," Mr. F. H. Oldham; "Sepia," Mr. G. Corson.

Your committee recommend the council to accept Mr. Waterhouse's report, and in view thereof to add together the first and second premiums, and divide them equally between those bracketed for the first place, awarding the third premium to the author of "Sepia." Your committee also recommend that in the event of the council ultimately deciding to carry out the designs of one of the authors bracketed for the first place, the premium he would then forfeit should be distributed among the four unsuccessful candidates in the last competition. The designs under each competition have been thrown open to the council and the public, and special facilities have been given to the press to comment thereon. Your committee believe that the method in which the competition has been conducted has given general satisfaction. It has met with the commendation of all the leading professional publications. Your committee beg to state that the competition has been most successful, and the council have now two, if not three, sets of drawings of an admirable character, in which all the requirements of the competition have been observed.

Your committee, however, are bound according to the terms of the resolution of the council to present their own report with the report of the adjudicator. They have no hesitation in recommending the council to select the design of "Wisdom, Strength, and Beauty" (sent in by Messrs. Verity & Hunt) as best adapted for the purposes the council have in view. They are architects of well-known reputation, and have erected some large buildings in London and the provinces, and can be thoroughly relied upon to carry out their work with strict integrity. No doubt the design "Queen Bess" is one of great merit, but your committee doubt how far it would be applicable in many of its details to pure business premises. Moreover, it will be seen that the quantitative surveyors report that the cost of the work will probably exceed that of Messrs. Verity & Hunt by a considerable sum. Your committee are further of opinion that the elevation of the design submitted by Messrs. Verity & Hunt is better adapted to the purposes for which the building is to be used. Your committee, therefore, do not hesitate to recommend the council to adopt the designs under the motto of "Wisdom, Strength, and Beauty." In this opinion your committee are confirmed by the leading professional journals of the day. Your committee, therefore, lay these facts before the town council, with their advice thereon, and await the further instructions of the council. Your committee, however, were further requested to advise on the estimated cost of the proposed building. They are of opinion that the estimate of Messrs. Verity & Hunt of 128,416*l.* may be taken as a fair basis for a calculation, and if to that amount is added 10 per cent. for estimate and contingencies, the total amount will be 141,257*l.* The lighting of the building and the furnishing thereof, in addition to that which can be removed from existing offices, will probably cost not more than 20,000*l.*, making the total estimated outlay 161,257*l.* To meet this outlay the council can dispose of the following buildings and premises: The Town Hall, Weekday Cross; the Municipal Offices, Albert Street; the Gas Offices, George Street; and the Water Offices, St. Peter's Gate. Your committee have had these valued by Mr. Tarbotton, the consulting engineer, and Mr. Brown, the borough engineer, and they report that in their opinion the above property is worth 70,000*l.* To this sum must be added the proceeds of the sale of the Police Station and adjoining properties to the Government, amounting to 12,000*l.* The council should also bear in mind that there is a surplus revenue on the administration of justice of between 2,000*l.* and 3,000*l.* per annum. The accommodation for the gas, over and above that derived from its present offices, and by which it will benefit (including new store rooms, workshops, show-rooms, &c.), may be valued at 20,000*l.* These items together make a total of 102,000*l.*, showing a deficiency of 59,257*l.* Your committee desire to call the attention of the council to the fact that the council are authorised by the Nottingham Improvement Act, 1874, to dispose of the corporate estates for purposes of erecting public offices and buildings. Your committee believe that several portions of such estates are at present in situations that will not be likely to be of any value for town improvements, and that they are producing no adequate return. Your committee suggest that such portions of the estates should be sold, and the proceeds appropriated to meet the contemplated deficiency in the expenditure on the new public offices. Your committee ask the

council to take all these circumstances into consideration. They advise (1) that the proceedings of your committee in obtaining the designs and awarding premiums should be approved; (2) that the Estates Committee should make inquiries into the propriety of parting with any portion of the estates for the purpose of using the proceeds for the erection of public offices; and (3) that the further consideration of your committee's report should stand adjourned until it is ascertained what portion of the estates can be fairly available for the purposes of covering the deficiency in the costs of the erection of the proposed new buildings.

At the meeting on Tuesday, the recommendation of the committee as to the distribution of the premiums was adopted. The further consideration of the subject was adjourned.

### THE PRINT ROOM, BRITISH MUSEUM.

A LETTER has been published from Mr. Seymour Haden on the proposed removal of some drawings from the Print Room. He says: On the plea that the painter's drawing is part of his picture, and that the two should be studied together, it has been proposed, or rather the proposal has been revived, to separate the old master drawings now associated with the prints in the British Museum, and to add them to the paintings in the National Gallery. Such a plea, preferred by an able and spirited director, intent on making the collection under his charge as complete an exposition of the painter's art as possible, cannot fail to command attention, and, it may be, to obtain a certain measure of assent; and yet it is not, I would submit, a plea which will bear examination, or which the trustees of the British Museum could accept as a warrant for the dismemberment of the collections of which they are the legal guardians. Those collections, ranging as they do from the rude contrivances of a prehistoric age, to the latest developments of human genius and resource, represent, with the printed books and manuscripts, of which, in fact, they are the illustrations, a comprehensive history of the arts of civilisation. But painting is only one of those arts. Engraving, original engraving that is, occupies a large place in that history, and, with sculpture and architecture, covers the greater portion of the ground. To each of these, in varying proportions, and sometimes to all of them together, the drawings in the British Museum, directly or indirectly, refer; the early German and Italian drawings chiefly to engraving; what may be called the *dessins raisonnés* of Leonardo and of Dürer to the arts of proportion and construction; the designs of Michael Angelo and of Flaxman to sculpture and the plastic arts. Nor is the connection less intimate between these eight or nine thousand Museum drawings and the large section of engraved historical portraiture, costume, habits, and customs, illumination, ornamentation, topography, and even caricature. Does the National Gallery propose to take the whole of them? If not, on what principle would it make a selection of them?

I have said that the early Italian and German drawings refer chiefly to engraving; I might have said almost exclusively, since the engravers and draughtsmen of that time had the field of art pretty much to themselves; while it is not the less a fact that those of them who are known to have been also painters—Mantegna, Mocetto, the Campagnolas, Schongauer, Dürer, and Lucas of Leyden—influenced the history and future of art greatly more by their drawings and prints than they did by their pictures. To take them out of their natural category, therefore, and for the sake of illustrating a single branch of art, however important, to dislocate the current facts of history, would, I submit, be both arbitrary and unphilosophical.

Suppose, however, the proposed divorce accomplished, and it were desired to ascertain the extent to which these master engravers had prepared themselves by drawings previously made for the composition and execution of their plates, is the student to examine the print, Dürer's *Adam and Eve* say, in one place, and the drawings which suggested it in another; the pen-and-ink studies of the arm of Eve and the leg of Adam in the National Gallery, and the torso of the latter again, since that portion of the print happens to have been copied (the modern engraver would say "translated") from another engraving in the British Museum? A species of torture is implied in this kind of study which I feel sure can no more have suggested itself to the promoters of the new scheme than it did to the authorities in Paris, when, for want of room, they left another of this master's prints—*The Great Fortune*—in the Bibliothèque, and carried off her wings to the Louvre!

Referring, again, to a later period, what clue should we have to the engraved art of Marc Antonio without the drawings of Raphael, which furnished the motives for his plates, or, to a later period still, to the strong personality of the etchings of the Dutch and Flemish schools, without the drawings of Rembrandt and of Ostade, of which they are reflections.

On the whole, therefore, I would submit that the plea for a separation of these historical collections has not been made out; and, moreover, that every purpose sought to be obtained by such separation might be better attained by a simpler proceeding—namely, by the acquisition by the National Gallery of as complete a collection as possible of autotype reproductions of old master



drawings, not only from the British Museum, but from other museums of Europe, and by the exhibition of at least as many of these as might be found to refer to the pictures actually in the gallery. I am under the impression that, for all purposes of study, and for the handling and exposure which such study supposes, such a collection would be found much more useful, and as a possession far less embarrassing, than the few precious originals which it has been sought to obtain for the purpose.

It is also, I should think, scarcely to be doubted that the advantage of an international exchange of this sort would equally recommend itself to Continental galleries.

## ARCHÆOLOGICAL AND TOPOGRAPHICAL BOOKS.

THE library of the late Sir Richard Colt Hoare was sold last week by Messrs. Sotheby, Wilkinson & Hodge. It consisted of several thousand volumes, including a collection of county histories and British topography, with numerous prints of portraits and views, many water-colour drawings, and works illustrating the favourite subject to which Sir Richard Colt Hoare devoted himself for many years. The sale realised 10,028*l.* 6*s.* 6*d.* Some of the books brought very high prices, as will be seen from the following list:—

Ashmole's Berkshire, 1719, 3 vols.—34*l.* 10*s.*; an extensive collection of topographical tracts relating to every county in England and Wales, in 73 vols.—34*l.* 10*s.*; "Annalia Dubrensis: upon the Yeerely Celebration of Mr. Robert Dover's Olympick Games upon Cotswold Hills," 1636, with the rare frontispiece and manuscript notes by Sir R. C. Hoare—16*l.*; Atkyns (Sir R.), Ancient and present state of Gloucestershire, 1712—38*l.*; Barnes (J.), Treatises of hawking, hunting, coat armour, fishing and Blasing of Arms, blackletter reprint of Wynkyn de Worde, with introduction by J. Haslewood, 1810—9*l.*; Blomefield's History of Norfolk, continuations by Rev. C. Parkin, 5 vols., 1739—75—90*l.*; Buckler's Ecclesiastical Antiquities of Wiltshire, Salisbury, &c., a collection of 690 water-colour drawings, made for Sir R. C. Hoare in 1808—9—10 by John Buckler—465*l.* Several similar collections by the same artist, but smaller in number, illustrating ecclesiastical and baronial and various other antiquities in England and Wales, were sold at prices varying from 10*l.* to 26*l.* 10*s.* Burton's "Monasticon Eboracense," York, 1758—11*l.*; Chronicles of England, Scotland, Ireland, France, &c., by Arnold, Fabian, Froissart, &c., edited by Dibdin, Douce, Sir H. Ellis, &c., 21 vols.—31*l.* 10*s.*; Civil War Tracts, arranged by the counties they refer to, 1641, &c., 21 vols.—46*l.* 10*s.*; Collinson's Somersetshire, 3 vols., Bath, 1791, large paper copy—53*l.*; the same on smaller paper—12*l.*; Dallaway's Sussex, Rape of Chichester, 1815, Rape of Arundel, 1819, Rape of Bramber, by E. Cartwright, 1830, 3 vols.—44*l.*; Capgrave, Nova Legenda Angliæ, black letter woodcuts, Wynkyn de Worde, 1516, several leaves mended, and the suppressed Life of St. Thomas à Becket, supplied from a shorter copy, sold not subject to collation for 12*l.*; Carter's Ecclesiastical and Monumental Antiquities of South Wales, 1803, 4 vols., with 208 drawings in sepia—161*l.*; Coningsby (Thomas, Earl of), Account of the Manor of Marden, Herefordshire, 1813, privately printed by the Earl of Coningsby, never published, and nearly all copies destroyed by the earl when he failed to get possession of the estates he claimed—80*l.*; Cope (W.), Tour in Monmouthshire, 1801, largest paper, printed for Sir R. C. Hoare and illustrated with 96 drawings in sepia by him, but it has not the map and other engravings from these drawings, a unique copy—200*l.*; Crocker (P.), 52 Drawings in Water-colours of Vases, Celts, and other Antiquities, engraved in Sir R. C. Hoare's "Ancient Wiltshire"—171*l.*; Croniques de Normandie, black letter, Rouen, no date—39*l.*; Hardyng (J.), Chronicle in verse, with continuation in prose by R. Grafton, black letter, by R. Grafton, 1543, fine copy, bound by Roger Payne—24*l.* 10*s.*; Dugdale's Warwickshire, augmented by W. Thomas, 1730—41*l.* 10*s.*; Enderbie, Cambria Triumphans, or Brittain in its Perfect Lustre, original edition, 1661—16*l.* 10*s.*; Fabian's Chronicle, black letter, 1559—19*l.*; Froyssart's Cronycles, black letter, 1535, W. Myddylton and R. Pynson, a few leaves mended, otherwise a fine large copy—41*l.* (Sir W. Tite's copy brought 70*l.*, and Sir M. Sykes's 42*l.*); collections of water-colour drawings and sketch-books of Sir R. C. Hoare, illustrating itineraries, sold at from 20*l.* to 48*l.* a volume, and one set of 144 in sepia, views in Wales for Giraldus' Itinerary, Stourhead, 1814, sold for 75*l.*; Hodgson's Northumberland, Newcastle, 1827—35, 7 vols.—51*l.*; Horæ B. V. Mariæ ad Legitimum Eboracensis Ecclesiæ Ritum, woodcuts, 1517, Rothomagi, G. Bernard et J. Cousin, one of the very rare York Service books—200*l.*; Hasted's History of Kent, Canterbury, 1778—99, 4 vols., 37*l.*; Higden (R.), Polycronicon, Englyshed by John de Trevisa, Ycarye of Barkleye at requeste of Syr Thomas Lorde Barkley, with continuation (1357 to 1460) by W. Caxton, black letter, woodcuts, Southwerke, by my Peter Treueris, 1527 (this copy, considered to be the *chef-d'œuvre* of the press of P. Treveris, formerly belonged to Thomas Brooke, who was executed in Norwich, August 30, 1570, and whose autograph and MS. notes

it bears)—47*l.*; Hoare (Sir R. C.), Modern History of Wiltshire, 6 vols., additionally illustrated with water-colour drawings by Buckler and others, 1822—43—200*l.*; three other copies without these drawings sold at 30*l.*, 32*l.*, and 54*l.*; Hoare's Hungerfordiana, Memoirs of the Family of Hungerford, Stourhead, 1823, with 34 drawings by Buckler—105*l.*; Hoare's Monastic Remains at Witham, Bruton, and Stavordale, Somerset, Frome, 1824—44*l.*; Views in North Wales, with tour, and MS., with drawings, by Sir R. C. Hoare—48*l.*; a similar collection with MS., 1793—1808—51*l.*; Views in Naples, drawings in sepia by Sir R. C. Hoare—54*l.* 12*s.*; Views in Sicily, with MS. and drawings by the same—63*l.*; Morant's History of Essex, 1768—44*l.*; Nichol's History and Antiquities of County of Leicester, 1795—1811, large paper, 4 vols.—230*l.*; Shaw's Staffordshire, 4 vols., large paper, 1798—1801—62*l.*

## THE ASHBURNHAM MANUSCRIPTS.

A PARLIAMENTARY paper has been published containing the correspondence which has passed this year between the British Museum and the Treasury with reference to the purchase of the Ashburnham MSS. The published papers include the original recommendation by the trustees of the Museum that the whole collection should be purchased for 160,000*l.*, the refusal of the Government, the recommendation that the Stowe Collection and the Appendix should be purchased for 90,000*l.*, the proposal by the Government to give 70,000*l.*, the offer of the Museum to make good the difference between the two prices, and the final agreement of the Government to purchase the Stowe Collection for 45,000*l.* With regard to the disposal of the collection, a Treasury minute, dated July 16, 1883, states that the Lords Commissioners of the Treasury have been in communication with the Lord-Lieutenant of Ireland and with the Chief Secretary on the two questions which remain for settlement—viz. (1) which of the manuscripts should be sent to Ireland, and (2) at what place those so sent should be deposited. The minute continues: "Upon the former point my lords observe that the selection is practically confined to the two sections of the collection in which are contained respectively the manuscripts in the Irish language, and those bearing more or less directly upon Irish history and literature. But the decision within these limits depends upon various considerations, which can only be decided by experts. The importance of making one national collection as complete as possible must be practically reconciled with the advisability of depositing a special class of documents in a place which either is or ought to be most convenient to their special students; and local feelings must be weighed against the interests of science. My lords will indicate at the end of this minute the means whereby they propose to solve this difficulty. As regards the place of deposit, it appears clear that with the possible exception of some documents of the nature of 'Public Records,' whatever part of the collection is sent to Ireland should be kept together, and not scattered; it must therefore be deposited in Dublin. After giving full consideration to the claims of the various places in that city where it has been thought the manuscripts might be preserved, Her Majesty's Government have come to the conclusion that the Royal Irish Academy best fulfils the necessary conditions. That institution has maintained a high reputation as a learned body, and is already the possessor of valuable collections illustrative of the history and antiquities of Ireland—collections which are and will be available for the use of students and the public. A difficulty, however, arises from the fact that although the Irish Academy is in many ways connected with the State, notably as receiving a large annual grant, it is not under direct Government control. To meet this it is proposed not to give the manuscripts to the Irish Academy, but to lend them to it indefinitely, upon the sole condition that they remain available for the use of students and the public upon terms to be agreed on; the manuscripts remaining the property of the Treasury. The terms of the loan to the Irish Academy, and the selection of the manuscripts to be so lent, should be settled in the first instance by a representative of the British Museum in conference with some gentleman from Ireland. For this purpose my lords consider that no person would be so appropriate as Sir Samuel Ferguson, who, as president of the Royal Irish Academy as well as deputy keeper of the public records of Ireland, seems marked out for the duty of giving advice in this matter. The ultimate decision and responsibility must, however, rest with the Government." An appendix contains a catalogue of the manuscripts in the Stowe Collection, with descriptive memorandum by Mr. R. B. Knowles.

The New Portion of the University of Indiana was, on the night of July 12, set on fire by lightning, which travelled along a telephone wire in the institution. The laboratory, museum, and library were completely destroyed. There were 15,000 volumes in the library, besides the so-called Owen collection, the loss of which is believed to be irreparable. The general loss is estimated at 200,000 dols., of which only 30,000 dols. is covered by insurance.



### THE MANCHESTER ART GALLERY.

THE structural alterations in progress at the Royal Institution, in order to adapt the building for the purposes of the new Corporation Art Gallery, are now completed, and, according to the *Manchester Guardian*, the result, so far as can at present be judged, is most satisfactory. The fundamental change is the removal of the old lecture theatre, which occupied the centre of the building and extended through its entire height. Formerly the floor of the theatre was raised above the level of the rest of the ground-floor. The floor level has now been made the same as that of the other rooms of the ground-floor. At the same time the galleries of the upper floor, which were divided into two parts by the lecture theatre, have now been made continuous. The ground-floor rooms on either side of the lecture theatre were formerly broken up by a number of partitions. All these have been removed, and the rooms on this floor now correspond with those on the floor above. Two fine continuous suites of rooms have thus been obtained on either floor. The only drawback from the change is that the back rooms on the ground-floor are rather dark. A magnificent new gallery has, however, been secured on the first floor, which will be better lighted than any of the rooms formerly used for the display of pictures. We understand that it is intended to appropriate the first floor, as in former years, to the autumn exhibition of pictures, which will be opened on the 31st of this month. The objects recently acquired as the nucleus of the permanent art collections will be displayed on the ground-floor. They will include the extremely interesting and valuable "Bock" collection of ancient textiles, which will occupy the whole of one of the long side galleries, a collection of Indian textile fabrics from the South Kensington Museum, and a loan collection of pottery from South Kensington illustrating the growth of the potter's art in various countries. A number of beautiful autotypes and engravings of drawings and paintings by the old masters, which have been purchased by or presented to the Art Gallery Committee, will be displayed in the other side gallery, while the rooms at the back will be devoted to casts of sculpture. The structural alterations have been most efficiently carried out under the direction of Mr. Allison, city surveyor.

### THE WELLINGTON MONUMENT IN ST. PAUL'S CATHEDRAL.

IT was again stated in the course of the correspondence respecting the Wellington Monument, that the late Dean Milman not only failed to appreciate Stevens's design, but actually ridiculed it. The Rev. W. H. Milman now asserts that there is no real foundation whatever for this assertion. "Dean Milman," he says, "had a high admiration for Mr. Stevens's design, and accorded to it his warmest praise. It is true that in common with many others he entertained some doubt as to the propriety, from an artistic point of view, of including in one monument two effigies of the same person, one representing him in the calm of death, the other in all the activity of life, and he expressed this doubt in the humorous way habitual to him. 'The design was all he could wish it, if only the duke would not ride into the cathedral upon the top of his own monument.' Solemn people with no sense of humour always fail to see the real scope of remarks like these, which, however telling, often express a passing impression rather than a mature judgment. Dean Milman had no wish that the monument should remain as it remains at present, incomplete. I have no doubt whatever but that he would have preferred to see the equestrian statue of the duke crowning the work, if no more appropriate single figure or group could be designed, rather than that it should continue in its unsatisfactory incompleteness.

"As to the proper place for the monument, however, Dean Milman entertained no doubt. As the custodian of a building of sublime proportions, distinguished for the perfect harmony of all its parts, he felt that it would be wrong to destroy the symmetry of the nave arcades by introducing beneath one of the arches a vast monumental structure, however indisputable the merits of such structure might be. He felt a scruple too, as he has often told me, taking into consideration the uses to which the cathedral might at any time be put, as the proper place for all solemn acts of national worship and the ever-increasing demands made for the accommodation of large congregations, at the idea of trenching upon the space which Sir Christopher Wren had left free, by the erection of any permanent structures upon any part of it. He felt, too, that if one archway of the nave were given up to a Wellington monument it would hereafter be more difficult to defend the remaining similar spaces from similar and less warranted intrusions. Hence his persistent and successful advocacy of the Consistory Court as the only unobjectionable place in the cathedral for a monument of the dimensions of that of the Duke of Wellington. I will venture to ask, after all, was not Dean Milman right in his decision? The Consistory Court may not be an ideal place for a monument, but ought a unique building like St. Paul's

to be sacrificed to the monument, however high its artistic merit, of one man, however great?

"If I may venture to add a word of my own upon the present controversy, I would suggest that if—in addition to the already advocated removal of the screen which, whatever may be its artistic merit, has lost all meaning, and as the former Consistory Court is no longer appropriated to the uses for which it was designed—the strong light which flows in from the great south window were tempered without being too much obscured, Mr. Stevens's fine monument of the great hero would be seen to the full as well where it is as it would be on the spot to which it is proposed to remove it."

### THE FORTH BRIDGE.

AMONG the provisions contained in the Forth Bridge Railway Act, 1882, is one for a quarterly inspection by officers of the Board of Trade of the works in progress for the construction of the bridge over the River Forth at Queensferry. The first inspection was lately made by Major-General Hutchinson, R.E., and Major Marindin. According to their report the principal part of the undertaking which has, up to the present date, been completed, is in connection with the temporary works necessary to insure that the actual construction of the bridge and the viaducts leading to it shall be properly carried out, which works are of very considerable importance.

At South Queensferry there has been enclosed an area of about 20 acres of ground, upon which have been erected large offices for the engineering staff; sheds for workshops, having an area of 9,734 square yards, now ready for the reception of the machinery, of which a large quantity has been ordered, and some is being delivered; four parallel foundations each 400 feet in length, upon which the large tubes are to be built up, with lines of railway between them to carry powerful cranes and drilling machines; gas furnaces, engines, and accumulator for providing hydraulic power, cement stores, testing-house, general stores, &c. A temporary wooden stage is also being run out from the south side to give facilities for the erection of the viaduct girders, and for the conveyance of the steel work for the south cantilever to the site at the centre of the Firth. This stage is immediately to the east of the viaduct, and will be about 1,900 feet in length, of which length about 500 feet are completed. At Inch Garvie, a rocky island, upon the base of which the great central pier will rest, a landing-stage, 320 feet in length, with wrought-iron piers and girders, is being constructed, and about 160 feet are nearly completed ready for the platform. At North Queensferry, on the Fife shore, two landing-stages or quays have been constructed, and some workshops and a number of cottages are in progress.

The permanent works which have been completed are as follows:—

At South Queensferry the foundation for viaduct pier, No. 1, which is on hard boulder clay, has been excavated, and is being concreted, and the foundations for viaduct piers, Nos. 2, 3 and 4, which are on a hard freestone rock, have been levelled and prepared for the concrete. At Inch Garvie, the only permanent work which has been done consists in the cutting away of the rock in preparation for the commencement of the piers. At North Queensferry the foundation for the cylinder at the north-west angle of the Fife pier has been cut out in the rock to the full depth, and is ready for concreting, and the cutting out of the rock for the foundations of the other three cylinders in this pier is in progress; although but little has as yet been done upon them; the foundation for the cantilever pier has been excavated to the full depth, and is being concreted; those for viaduct piers, Nos. 12 and 13, are completed, and the excavation for that of viaduct pier No. 11 is well forward. All these foundations are on whinstone rock, and the cantilever and viaduct piers are to be faced with granite, of which a large quantity is stated to be ready dressed, and some is delivered. The engineers state that the steel plates first required for the large tubes are being rolled at Messrs. Siemens' works at Landore, that the first of the Queensferry main pier caissons on the pneumatic system is in course of construction at the works of Messrs. Arrol, at Edinburgh, and that the viaduct girders have been ordered.

The engineers have furnished diagrams of the strains upon the piers and other parts of the bridge, showing that, according to the result of their calculations, under no possible combination of a 56 lbs. wind blowing in any direction, and a rolling load of 3,400 tons on the span (i.e. two tons to the foot), will the stress either in tension or compression exceed one-fourth of the ultimate resistance of the steel to be used in the construction of the bridge, viz., 30 tons per square inch in tension, and 34 tons in compression. The specifications provide for the testing of the steel being conducted in the manner prescribed by the Admiralty regulations, and the specimens of steel and the results of the tests show that the requirements of the Board of Trade have been more than complied with.

In conclusion the inspectors report that the preparations which have been made, and the machinery and plant which have been ordered, indicate that it is the intention of the engineers and the



contractors to carry out the works in a manner suitable to the magnitude of the undertaking, and that, so far, these works have been completed in accordance with the authorised plans, and in a satisfactory manner.

### BOROUGH ENGLISH.

A CASE which was heard at the last Gloucestershire Assizes is suggestive of the connection between archæology and law. It has been recognised that among the unwritten laws of England are particular customs which affect only the inhabitants of certain districts. "These particular customs, or some of them," says Blackstone, "are without doubt the remains of that multitude of local customs out of which the common law, as it now stands, was collected, at first by King Alfred, and afterwards by King Edgar and Edward the Confessor, each district mutually sacrificing some of its own special usages, in order that the whole kingdom might enjoy the benefit of one uniform and universal system of laws. But for reasons that have been now long forgotten, particular counties, cities, towns, manors, and lordships were very early indulged with the privilege of abiding by their own customs in contradistinction to the rest of the nation at large, which privilege is confirmed to them by several Acts of Parliament." One of those customs is called Borough English, and through it the youngest son inherits the estate in preference to all his elder brothers. In order to apply the principle it is necessary that the estate should be within the boundary of the ancient borough in which the custom was observed, and in the case that was heard at Gloucester it was agreed between counsel that the only question, except that of mesne profits, was whether the custom of Borough English prevailed in the ancient city of Gloucester, and whether the premises in question were within the area to which such custom applied.

The plaintiff in the case was the heir by the common law—being the eldest son of the deceased eldest son of the owner of the property. But on the death of the owner, his youngest son (who was the uncle of the plaintiff) entered into possession of the premises.

Mr. Powell, Q.C., was counsel for the defendant, and in his address he said there could be no doubt that the custom of Borough English prevailed in Gloucester, which was one of the most ancient cities in the kingdom. The ancient Britons erected their huts upon its site, and it became one of the twenty-eight cities which were founded in England previous to the Roman invasion. The Romans made it a military station, and when they left England the Saxons occupied it as the capital of Mercia, and established in it their laws and customs, and as early as the eighth century, and consequently long before the Norman Conquest, which introduced the feudal system, as ancient chroniclers said, "it was one of the noblest cities in the kingdom." For upwards of a thousand years the Saxon custom of Borough English had prevailed in the city. It had survived the feudal system which prevailed in other parts of England, the intestine struggles of the Plantagenets, the iron rule of the Tudors, the lawlessness of the Stuarts, even the more ruthless hands of so-called law reformers. What the origin of the custom was is lost in the darkness of antiquity. Many explanations had been suggested, some learned and others foolish, some grave and others ribald, but that in Gloucester a man's youngest, and not his eldest son, was the heir-at-law he had never heard disputed until now; and the property in question being far within the city boundaries, was consequently subject to the custom of Borough English. The boundaries of the city were as well known, as carefully marked, and as often perambulated as those of any other locality in the kingdom. Not only stones existed to testify it, but from time immemorial, until a very recent period, those stones had been beaten and the bounds perambulated periodically for the express purpose of keeping up the memory of the city boundary. This could be proved by a hundred people who had seen it or heard it from their forefathers, and all would testify that the property in Hare Lane was far within the city boundary. By the statement of claim the property was described as a dwelling-house, "situate on the north side of the city wall of the city of Gloucester on the outer side of the said wall." It was known that the walls in Gloucester were built by the Romans, and they continued to occupy the same site or nearly so until Charles II. caused them to be demolished because they had withstood the memorable siege by his father, which led to the loss of his crown and life. But were the walls of the Roman station at Gloucester the boundaries of the city? The Romans left Britain about the middle of the fifth century, and the Saxons took possession of it afterwards. The Romans and their walls had nothing to do with the custom of Borough English. It was the Saxons who established that custom, which had prevailed ever since. Ancient maps existed which had always been received and acted upon as authoritative maps of the boundaries of the city. No doubt the boundaries had of late years been enlarged for political and municipal franchises, but it was not necessary to discuss whether this custom had been extended with those enlargements. Hare Lane had at all times been within the old boundary. In the conveyance of this very property from the Dean Forest Railway Company, it was described

as being within the city of Gloucester. But there were numerous instances in which property, even further outside the Roman walls than this property, had been dealt with, and admitted by those interested in proving the contrary to be within the boundary of the city. He could not give a better illustration of this than the Shire-hall. The old Roman wall in that part of the city passed through the site of a house a few doors above, crossed the Westgate Street, went along College Street, passed through the south porch of the cathedral, part of which porch was actually built upon it. Why, so far from this Shirehall being outside the city, it required an Act of Parliament in 1814 to declare that all proceedings taken within it at the county assizes should be held to have been transacted within the county. Could there be a more conclusive proof that the Roman walls were not the boundaries of the city? As to the policy of the custom of Borough English, of course they had nothing to do with it, but it could not be more impolitic—that was worse for people generally—than that a man's eldest son should have all his land if he died without a will. Those who did not like the custom could easily avoid it by making wills and leaving their lands to whom they pleased, but, as to the ancient custom which had so long prevailed, the citizens say, as was said of old, *Nolimus lege Angliæ mutare*.

After some witnesses had been examined respecting the custom, counsel for the plaintiff acknowledged that evidence was against his client, and judgment was accordingly entered for the defendant.

### CONTRACTORS' GRIEVANCES.

A LETTER from a contractor has appeared in the *Dundee Advertiser*, in which he writes: What we are most concerned about, and what we would protest against with all our might, is the painfully loose and absolute system of generalising which is only too manifest in the specifications of some engineers, instead of definiteness and precision in particulars which one would expect to find, and the attempt which is made too often successfully to fasten on the contractors the responsibility of the whole by the insertion of clauses which "secure" too well the contractor on all sides by leaving him at the mercy of the engineer, and making the will of the engineer absolute and supreme. Now, there can be no question that much of this is due to imperfect knowledge, and any one knows that has had much experience of contract work that a good deal of the looseness and carelessness in drawing up specifications would often result in serious differences between contractors and engineers but for the timeous saving clauses put in in the interests of the engineer by himself, and by the insertion of which he gains an exceptional and privileged domination. But in the hands of inexperienced men, or indeed of any man, this is a dangerous power, and ought not to be. No party who places his services and his capital at the sight and direction of another should be so conditioned, either by the necessities of the times, the exigencies of his calling, or the stipulations of another's will, as to be obliged to continue in the exercise of all these means and take the whole risks, and at the same time be denied redress against the dangers of incompetence or the presumptions of authority. It is cruel and selfish, and positively unfair to think so. Yet the cases are by no means infrequent. Common sense would decide that it is only the barest justice to give an open door for the free play of equity between man and man. All appearances to interfere with the free and unbiassed administration of just principles in public life and business should be carefully excluded, and those who are responsible for its interruption, or the possibility of interrupting it by partial or prepossessed fancies of their own, are guilty of sowing the seeds of distrust, and promoting consequences prejudicial to both parties concerned. It is a satisfaction to be noted that amongst the most eminent of our engineering profession a wider and more generous spirit of justice prevails in their dealing with business men. It can be to the credit of neither the individual nor the profession to assume a position calculated to reflect unjustly on the other. Engineers are not infallible, and their interests are not indifferent to themselves. It would be well if this was more generally recognised when they come to claim the right of arbitrating between themselves and their contractors. Why should an engineer be an arbiter in his own case any more than a contractor? Is it not enough that you bind the latter to a whole chain of conditions and restrictions, involving "inspections," "satisfactions," and responsibilities innumerable, even to the extent of "omissions," as well as commissions by the former, that you should seek to tie the contractor neck and heels to the will and fancy of his engineer? It is against this dangerous, one-sided, selfish principle we would wage perpetual war. At this moment about half a dozen cases are known to us where the obnoxious and iniquitous thing is rising up to threaten the interests of contractors by withholding an impartial inquiry into particulars. One was reported in your columns quite recently. It was raised at the instance of Mr. George Mackay, contractor, Broughty Ferry, against the Barry Local Authority, for payment of the sum of 1,248*l.* odd on account of extra and additional works ordered by their engineer, Mr. Alex. McCulloch, Dundee, during the execution of the Carnoustie water-



works. Some time before this a case appeared by Mr. M'Rorie, builder, Crieff, in connection with a Free Church building contract at Comrie, and concluding for 800*l.* as extras, &c. Both cases were tried in the Court of Session, and both aimed at setting aside the arbiter named under the contract, who happened to be the architect and engineer of the works. The results were very dissimilar. Mr. M'Rorie in the First Division of the Court succeeded, while Mr. Mackay (whose case was sent before the Second Division Judges) failed. The Court held that the clause of reference to the engineer as arbiter excluded the action. Manifestly this is a hard case, and as it is one intimately affecting the rights and whole position of contractors, it ought not to be lost sight of or allowed to remain where it is. It might be worth while carrying the case further. It is well known that the English Courts take a much more common sense view of these matters than our Scottish Courts, and I have heard of a case where it was distinctly laid down by English Judges "that an engineer could not be an arbiter of his own work." I do not know if Mr. Mackay intends to carry this case to the House of Lords, but in connection with it I would make a suggestion. It is this, that the builders and contractors of Scotland, as parties most interested, should take the question up and fight the case out in the House of Lords with the very best counsel that can be got. In this way only can we ever hope to arrive at a test subject, and I shall be very glad to contribute my share to the expenses. Two or three others personally known to me have volunteered to do the same. The point is so important to the contracting world that it is worth settling in the highest tribunal of the realm; but the burden should not be allowed to fall on any one person. Let contractors speak out then and take some action on the subject, for unless they do something to resist the dangerous inroads made by some professional men on their rights and liberties they will be parties themselves to driving respectable men out of their ranks, because to endure such treatment is neither consistent with honour nor independence.

### ART WORKMANSHIP.

**The Newcastle Pastoral Staff.**—A staff, which was designed by Mr. R. I. Johnson, has been presented to Dr. Wilberforce. It is of carved ivory, with adornments of silver gilt. The total length is 6 feet 3 inches. The staff is in four pieces, which are joined by sockets of silver gilt *repoussé* work with screws, so as to be readily taken to pieces. The upper and most important portion consists of the crook, with the knop beneath it. The diameter of the crook is 4½ inches, and within it is a sculpture of the Annunciation in ivory, which is used as indicating the doctrine of the Incarnation. The under side of the crook is supported by an angel in ivory with outstretched hands, and the outer edge is decorated by small silver-gilt crockets. Below the crook comes the knop, which is all of silver-gilt tabernacle work. It is hexagonal in form, and has six niches, containing the following figures: 1. St. Cuthbert. 2. An angel bearing a shield with the arms of the See and Bishop. 3. St. Aidan. 4. An angel with a blank shield. 5. St. Nicholas. 6. An angel with a blank shield. Beneath is a band of delicate tracery, and the composition is enriched by crocketed pinnacles and canopies, and supported on a carved and ogee-formed bracket, springing from an embossed ring that surmounts the upmost socket of the shaft. Around this socket the following inscription is engraved on a spiral ribbon: "In honorem Dei et ecclesie decus, Bacuum longi Episcoporum ordinis Futurum ut sperant gestamen Læti primo Præsuli Novocastrenses dedicant MDCCCLXXXIII." The total length of this portion of the staff is about 19½ inches. The staff itself is carved with a delicate spiral ornament, and its lower termination is a silver-gilt *repoussé* socket.

### ENGINEERING WORKS.

**The Shustoke Reservoir, Birmingham.**—The new storage reservoir which has been constructed in connection with the Birmingham Waterworks was opened recently, by the chairman of the Water Committee of the Corporation. Its area is nearly 90 acres, and in form it is an irregular parallelogram, 1,300 yards long by 400 wide, and its capacity 420 million gallons. The depth varies from 16 feet at the upper end to 25 feet at the lower, the average depth being 20 feet. At the bottom is a natural bed of solid clay, and the artificial embankments are rendered impervious by having in their structure a puddle trench 63 feet 6 inches wide at the base carried from a depth of 14 feet below the natural surface of the ground to a height of 3 feet above the top water level. The greatest height of embankment is at the Whitacre end—namely, 30 feet 6 inches, and this has a thickness of 234 feet at the base and 20 feet at the summit. The inner slopes are protected by substantial layers of concrete made with Portland cement, while for two yards above and below the top water level boulders are pitched in the concrete to resist the wash of the waves. After passing through the reservoir, the water flows by a line of pipes to the filter beds, seven in number, at Whitacre pumping station, which are capable of passing 12½ million gallons in

twenty-four hours, and thence the water will be forced through a 36-inch main to Minworth, where it meets the water from Plants Brook, and flows on in divided streams to Aston. The contract for the work, including the construction of a small supplementary reservoir, which holds 20 million gallons, and which filters the water from the river Bourne, was taken at 78,900*l.* by Messrs. John Aird & Sons, exclusive of buildings and pumping plant, supplied by Messrs. Watt & Co., and of the land, which cost 35,000*l.* By this extensive addition to their works the Birmingham Corporation have raised their storage accommodation to 607 million gallons, a quantity which would enable them in time of drought, and supposing the regular supply from wells and streams were suddenly to fail by one-half, to dispense 14 million gallons of water daily for 100 days, which is believed to be ample to meet the requirements of the district for many years to come. When the Corporation took over the water supply from the old waterworks company in 1875, 8½ million gallons of water were being pumped daily to supply the wants of Birmingham and the adjacent district. The works have been carried out from the designs and under the superintendence of Mr. J. W. Gray, the engineer of the water department. Mr. N. T. Gray, was clerk of works.

### CHURCH BUILDING AND RESTORATION.

**Wrexham.**—The foundation-stones of a new Welsh Wesleyan chapel have been laid. The cost of the building, which will contain seats for 250 worshippers, is estimated at 1,800*l.* The architect is Mr. Alfred C. Baugh, of Wrexham, and the contractors are Messrs. Hughes & Owen, of Penybryn.

**Moulsham.**—St. John's Church, which has been undergoing improvement and enlargement, has been reopened. The old tower at the west end of the church, and the whole of the west front have been removed, the nave lengthened by 22 feet, and a new tower of larger dimensions built. The work has been carried out by Messrs. Brown, of Chelmsford and Braintree, from the designs of Mr. Fred Chancellor.

### GENERAL.

**Mr. Herkomer, A.R.A.**, has been awarded a first-class medal by the jury of the International Art Exhibition, at Munich.

**The Dunfermline Fine Art Association** will open its first exhibition on December 1.

**The First Exhibition of the Hawick Fine Arts Association** was opened in the Exchange Buildings, on Monday. About nine hundred works are exhibited.

**Mr. James G. Laing**, of Glasgow, has obtained the first prize (20*l.*) for the best water-colour drawing contributed to the Welsh Eisteddfod. Mr. Laing is one of the recently-elected Associates of the Scottish Society of Water-Colour Painters.

**Professor Ferrario** has been awarded the prize for the best design for the façade proposed to be built for the cathedral of Milan.

**Mr. W. H. Wormleighton**, of Cardiff, took first prize at the National Eisteddfod for stone carving, with a Portland stone panel of original design in modern Renaissance style; first prize in wood carving, with a boxwood figure of *Moses descending from the Mount*, and second prize in applied design with a sgraffito panel. Mr. Alma-Tadema, R.A., and Mr. Frederick Wedmore were the adjudicators.

**A Design**, by Mr. James Wilson, architect, Leeds, has been selected for a limited competition for the new Wesleyan chapel, at South Elmsall, near Doncaster. The works will be shortly commenced.

**The Works at the Opera House** on the Thames Embankment are to be resumed, and Messrs. Perry & Co., of Bow, have, it is said, undertaken to complete the building in time for the season of 1884. Mr. Mapleson is the lessee.

**Fort House, Broadstairs**, which is better known as "Bleak House," where the late Charles Dickens frequently resided, has been sold by auction for 2,500*l.* Lawn House, adjoining, which was also an occasional residence of Dickens, was sold for 730*l.*

**Offices for the "North Star,"** erected from the designs of Mr. G. G. Hoskins, architect, have been opened at Darlington.

**The Lambeth Vestry** have decided to build a new town hall and vestry offices, the estimated cost of which amounts to between 40,000*l.* and 50,000*l.*

**The Bradford Corporation Gasworks Report** shows a profit of 10,000*l.* on the undertaking during the past half-year, against 6,400*l.* in the corresponding period last year.

**The Glenboig Union Fire-Clay Company, Limited**, have been awarded a gold medal for their exhibits of fire-bricks, fire-clay gas retorts, glazed sewage pipes, &c., at the Amsterdam International Exhibition.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, AUGUST 18, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."*

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

### COMPETITIONS OPEN.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

### CONTRACTS OPEN.

**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

**BALLYWATER HARBOUR.**—Sept. 5.—For Building Stone Beacon on Sculmartin Rock. The Secretary, Irish Lights Offices, Dublin.

**BARNARD CASTLE.**—Aug. 18.—For Building North-Eastern County School. Mr. R. J. Johnson, Architect, 3 Arcade, Newcastle-on-Tyne.

**BATLEY.**—For Additions to Grammar School. Mr. Walter Haustock, Architect, Branch Road, Batley.

**BECKENHAM.**—Sept. 3.—For Additions to Stables and Buildings at the Old Manor House. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

**BELFAST.**—Aug. 27.—For Building Goods Shed on Donegall Quay, with Malleable Iron Roof, Cast-iron Columns, &c. Mr. W. Thompson, Harbour Office, Belfast.

**BREWCASTLE.**—Aug. 24.—For Building Bridge at Clatterford. Mr. J. A. Cory, County Surveyor, Carlisle.

**BISHOP AUCKLAND.**—Aug. 22.—For Building Chapel, Superintendent's House, and Entrance Gates at Cemetery. Mr. J. P. Pritchett, Architect, 24 High Row, Darlington.

**BLACKBURN.**—For Making of New Road from Hollinshead Mill to Halliwell Bridge, Fockholes, distance about three-quarters of a mile. Mr. James Bertwistle, Surveyor, Blackburn.

**BLACKBURN.**—For Drainage of Ellenshaw Terrace and Ryal Farm, Fockholes, for the Blackburn Rural Sanitary Authority. Mr. James Bertwistle, Surveyor, Blackburn.

**BLACKPOOL.**—Aug. 20.—For Additions to Victoria Hotel. Mr. Thomas P. Worthington, Architect, Blackpool.

**BRITON FERRY.**—Aug. 27.—For Additions to Chapel. Mr. H. Francis Clarke, Architect, Briton Ferry.

**CAMBORNE.**—Sept. 1.—For Building Mission Room and House. Rev. W. P. Chappel, Rectory, Camborne.

**CARDIFF.**—Aug. 27.—For Building Thirteen Cottages, Upper Grange town. Messrs. James, Seward & Thomas, Architects, 1 St. John's Square, Cardiff.

**CARLOW.**—Sept. 10.—For Chancel to Staplestown Church. Mr. J. F. Fuller, Architect, 179 Great Brunswick Street, Dublin.

**CARMARTHEN.**—Aug. 21.—For Alterations to St. David's Church. Messrs. Middleton & Son, Architects, Cheltenham.

**CLATTERBRIDGE.**—Aug. 20.—For Building Water Tower. Mr. Alfred Culshaw, Rumford Court, Liverpool.

**CLYNDU.**—Aug. 28.—For Building Board School. Mr. E. Sidney Hartland, 7 Rutland Street, Swansea.

**DAGENHAM.**—Aug. 29.—For Building Infant School. Mr. John Hudson, Architect, 80 Leman Street, Whitechapel.

**DARLINGTON.**—Aug. 20.—For Building Five Dwelling-houses. Mr. John Mackenzie, 75 North Road, Darlington.

**EASTBOURNE.**—Aug. 22.—For Construction of Pipe Sewers, &c. Mr. J. H. Campion Coles, Clerk to the Local Board, Eastbourne.

**EDINBURGH.**—Sept. 10.—For Construction of Wet Dock. Messrs. Blyth & Cunningham, C.E., 135 George Street, Edinburgh.

**FEATHERSTONE.**—Sept. 1.—For Building Two Schools, School-house, &c. Mr. Frank W. Bradley, Solicitor, Castleford.

**GUIDEBRIDGE.**—For Building Two Houses. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

**KILLVLEIGH.**—Aug. 18.—For Additions to Manse. Mr. W. Batt, jun., 4 Wellington Place, Belfast.

**LEADHILLS.**—For new Free Church. Mr. J. B. Wilson, Architect, 112 Bath Street, Glasgow.

**LEICESTER.**—Sept. 4.—For Widening and Deepening the River Soar. Mr. J. Gordon, C.E., Borough Surveyor, Town Hall, Leicester.

**LLANFAIRFECHAN.**—Aug. 23.—For Building Girls' School. Mr. Thomas North, Plas, Llanfairfechan.

**MANCHESTER.**—Aug. 24.—For Reconstruction of Bridge, Dewsnap Lane. Mr. Charles Sacré, C.E., London Road Station, Manchester.

**MIDDLESBROUGH.**—Sept. 8.—For Construction of Hury Reservoir. Mr. Mansergh, 3 Westminster Chambers, Victoria Street, S.W.

**NANTWICH.**—Aug. 24.—For Supplying and Laying Cast-iron Water Mains (6,480 yards). Mr. J. Aldersey Davenport, C.E., 152 Hospital Street, Nantwich.

**NEWENT.**—Aug. 22.—For Building eight Labour Cells, &c. Mr. C. N. Tripp, Architect, Gloucester.

**NEWPORT.**—Aug. 22.—For Rebuilding Premises. Messrs. A. O. Watkins & Son, Architects, 113 Doc. Street, Newport, Mon.

**NORTHAMPTON.**—Aug. 24.—For Building Theatre and Opera House. Mr. C. Dorman, 78 Abingdon Street, Northampton.

**OXFORD.**—Aug. 27.—For Construction of Four Filter Beds, and other Works. Messrs. Hawksley, C.E., 30 Great George Street, S.W.

**PILKINGTON.**—For Building Five Houses. Messrs. Sellers & Hamilton, Architects, Union Chambers, Bury.

**PRESTON.**—Sept. 1.—For Building the Harris Free Library and Museum. Mr. J. Hibbert, Architect, 149 Church Street, Avenham Street, Preston.

**QUEENSBURY.**—Aug. 22.—For Chancel to Church. Messrs. T. H. and F. Healey, Architects, 42 Tyrrell Street, Bradford.

**RIPLEY.**—Aug. 20.—For Building School at Waingroves and a School at Hartshay. Mr. James Kent, Architect, St. James's Chambers, Derby.

**SHIPLEY.**—For Building Shop. Mr. Samuel Jackson, Architect, 33 Kirkgate, Bradford.

**SLEAFORD.**—Sept. 1.—For Construction of Reservoir. Mr. Jesse Clare, Sleaford.

**SOUTHAMPTON.**—Aug. 25.—For Strengthening Part of Jetty, Town Quay. Mr. J. G. Poole, Surveyor, 9 St. Michael's Square, Southampton.

**STAINCLIFFE.**—Aug. 23.—For Building Detached House. Mr. A. E. Rhodes, Architect, Cheapside, Heckmondwike.

**STAINES.**—For Building Small Villa. Mr. H. C. Pollard, Surveyor, 14 Duke Street, Adelphi, W.C.

**TONGWYNLAIS.**—Aug. 25.—For Rebuilding House and Shop. Mr. James M'Bean, Architect, Abertillery, Mon.

**WALTHAMSTOW.**—Aug. 24.—For Works at Sewage Works, Low Hall. Mr. G. B. Jerram, C.E., Surveyor, Town Hall, Walthamstow.

**WESTON-SUPER-MARE.**—Aug. 18.—For Completion of Hospital Buildings. Messrs. Hans Price & Wooler, Architects, Weston-super-Mare.

**WEST BROMWICH.**—Aug. 20.—For Building Board Schools, Black Lake. Mr. E. Pincher, Architect, 292 High Street, West Bromwich.

**WICK.**—Sept. 7.—For Building House. Messrs. D. & J. Bryce, Architects, 131 George Street, Edinburgh.

### TENDERS.

#### ABERDEEN.

For Building Art Gallery and Museum, Aberdeen. Messrs. MATTHEWS & MACKENZIE, Architects.

#### Accepted Tenders.

Pringle & Slessor, mason	£2,997 0 0
Gunn & Elder, plumber	260 0 0
Roger & Baxter, plasterer	382 0 0
Pirie, slater	110 0 0
J. & S. Fyfe, painter	290 0 0
Smith & Sons, ironwork	269 19 0
<b>Total</b>	<b>£4,308 19 0</b>

The joiner-work will amount to about £900.

#### ASHTON-UNDER-LYNE.

For Workshop at Hooley Hill. Mr. J. H. BURTON, Architect, Ashton-under-Lyne.

CLAYTON, Denton (accepted).  
Twelve tenders were received.

#### BRIDGEND.

For Erection of Dwelling-house, Coach-house, Stables, &c., at Park Street, Bridgend. Mr. G. F. LAMBERT, Architect, Bridgend.

Richards	£1,275 10 0
McGAUL (accepted)	1,180 0 0
James	1,100 0 0

#### BROMYARD.

For Alterations to the Tramp Ward at the Workhouse, Bromyard.

Rouse Bros.	£375 0 0
Tarbill	298 0 0
Lewis	279 18 0



**BRIDGWATER.**

For Construction of a Wrought-iron Lattice Girder Bridge of 52 feet span on masonry abutments at Stanmoor, at the mouth of the river Tone, for the Somersetshire Drainage Commissioners, Mr. ALFRED WOODHOUSE, Engineer, Bridgwater.

Durnford & Son, Totterdown, Bristol . . .	£2,657 0 0
Escott, Bridgwater . . .	2,300 0 0
Robson, Woodford, London . . .	2,200 0 0
Pickthall, Acocks Green, Birmingham . . .	1,950 0 0

**BURTON-ON-TRENT.**

For the Erection of a Three-storey Beer and Barley Store, 200 feet by 45 feet, at Burton-on-Trent, for the Burton Brewery Company. Mr. N. JOYCE, Architect, Stafford.

Carlrick, Birmingham . . .	£3,650 0 0
Whittome, Stafford . . .	3,500 0 0
Lynex, Walsall . . .	3,495 0 0
J. & C. Hunter, Burton-on-Trent . . .	3,350 0 0
Gibson, Tunstall . . .	3,300 0 0
Mellors, Burton-on-Trent . . .	3,295 15 0
Wigley, Burton-on-Trent . . .	3,234 0 0
Espley, Stafford . . .	3,200 0 0
Stevenson & Son, Burton-on-Trent . . .	3,020 0 0
Hodges, Burton-on-Trent . . .	2,989 10 0
Greenwood, Mansfield . . .	2,980 0 0
Lowe & Sons, Burton-on-Trent . . .	2,977 0 0
CHAMBERLAIN BROS. (accepted) . . .	2,957 0 0

**CARLINGHOW.**

For the Supply and Delivery of Wrought and Cast-iron Girders for fireproof floor at the Dock Iny Mills, Carlinghow, Batley. Mr. J. T. LAW, Architect, Batley.

Teall, Wakefield . . .	£148 0 0
Dawson & Nunnally, Leeds . . .	136 0 0
BAGSHAW & SONS, Batley (accepted) . . .	111 6 6
Harrison & Hammond, Wakefield . . .	108 0 0

**CARLTON COLVILLE.**

For Building Church at Carlton Colville. Mr. GEORGE GLOVER, Architect, Lowestoft.

Bray, Yarmouth . . .	£1,775 0 0
Grinwood, Weybread . . .	1,590 0 0
Bedwell, Lowestoft (too late) . . .	1,548 0 0
Hawes, Norwich . . .	1,500 0 0
WILKINS, Norwich (accepted) . . .	1,477 10 0

**CHESTER.**

For Contract No. 1 to Supply, Fix, &c., Iron Posts, Rails, and Gates, at the Cattle Market, Chester.

Shaw, Chester . . .	£981 8 2
Harvey, Chester . . .	950 4 0
Wood & Co., Chester . . .	911 7 6
Lloyd, Chester . . .	910 0 0
Abell, Chester . . .	900 2 0
Button, Crewe . . .	841 14 0
Mowle, Son, & Co., Chester . . .	801 19 0
SMITH & Co., Whitechurch (accepted) . . .	644 14 6

For Paving, &c., at the Cattle Market, Chester.

Speight, St. Helens . . .	£5,700 0 0
Ogden, Manchester . . .	4,506 16 0
Brown, Chester . . .	4,338 8 0
Peen, Seacombe . . .	4,210 0 0
VERNON, Chester (accepted) . . .	3,730 0 0

For Contract No. 3, Erecting Shedding, &c., at the Cattle Market, Chester.

Vernon, Chester . . .	£2,914 10 0
BROWN, Chester (accepted) . . .	2,642 0 0
Matthews, Nantwich . . .	2,628 0 0

**COCKERMOUTH.**

For Erection of a Double School in the Fairfield, Cocker-mouth, for 250 Boys and 210 Infants, for the Cocker-mouth and Papcastle School Board. Mr. R. S. MARSH, Surveyor and Architect. Quantities not supplied.

BORROWSSCALE, total tender, exclusive of Desks (accepted) . . . £2,716 15 0

**Bricklaying and Sewerage.**

J. & W. Laing . . .	1,853 0 0
Borrowdale . . .	1,820 10 0

**Joiner Work, including 165 Dual Desks.**

McArd . . .	756 10 3
Robinson . . .	715 10 0
J. Banks . . .	647 10 0
Armstrong . . .	615 0 0
Crow & Co., exclusive of Desks . . .	489 13 9

**Plumbers.**

J. B. Banks . . .	168 0 0
Fletcher & Son . . .	154 0 0
Bell . . .	149 0 0

**Plasterers.**

Altringham . . .	121 7 0
Lawson . . .	98 18 0
Waller . . .	92 0 0

**Painters and Glaziers.**

Taylor . . .	75 0 0
Davis . . .	68 10 0
Pearman . . .	42 10 0
Boyd . . .	33 0 0

**Slaters.**

Mandel . . .	154 0 0
Armstrong . . .	134 15 0
Manson . . .	115 0 0

**For Paving Playground.**

Lowe . . .	120 0 0
Connard . . .	120 0 0

**CROMER.**

For Villa Residence, Cromer, Norfolk, for Mr. F. Locker. Mr. JOHN B. PEABCE, F.R.I.B.A., Architect, Norwich.

Jornish & Gaymer . . .	£6,833 8 0	£368 5 0
Jabitt & Son . . .	6,718 0 0	855 0 0
Downing & Son . . .	5,934 0 0	759 0 0
Chapman . . .	5,850 0 0	740 0 0
WEGG (accepted) . . .	5,836 0 0	685 0 0

**CROYDON.**

For Erecting a Laboratory at the High School, Wellesley Road, Croydon, for the Girls' Public Day School Company (Limited). Mr. C. HENMAN, Architect. Quantities by Mr. Charles FitzRoy Doll.

J. & C. Bowyer, Upper Norwood . . .	£475 0 0
Marriage, Croydon . . .	465 0 0
Smith & Sons, South Norwood . . .	439 0 0
MAIDES & HARPER, Croydon (accepted) . . .	417 0 0

For Erecting a New Wing for Out Patients, &c., to the Croydon General Hospital, London Road, West Croydon. Mr. CHARLES HENMAN, Architect, 64 Cannon Street, E.C. Quantities by Mr. Charles FitzRoy Doll.

**For the New Wing.**

Docking, Croydon . . .	£6,141 14 4
Marriage, Croydon . . .	5,775 0 0
Maides & Harper, Croydon . . .	5,596 0 0
J. & C. Bowyer, Upper Norwood . . .	5,575 0 0
Hobbs, London . . .	5,075 0 0
SMITH & SONS, South Norwood (accepted) . . .	4,973 0 0

**If Oak Floors, instead of Deal, in Four Wings.**

Maides & Harper, Croydon . . .	95 0 0
J. & C. Bowyer, Upper Norwood . . .	75 0 0
Marriage, Croydon . . .	73 15 9
Hobbs, London . . .	73 0 0
Docking, Croydon . . .	51 17 6
SMITH & SONS, South Norwood (accepted) . . .	44 0 0

**For Additional Length of Ten Feet.**

Marriage, Croydon . . .	234 12 8
Docking, Croydon . . .	280 3 0
Maides & Harper, Croydon . . .	223 0 0
J. & C. Bowyer, Upper Norwood . . .	215 0 0
Hobbs, London . . .	194 0 0
SMITH & SONS, South Norwood (accepted) . . .	193 0 0

**DARLINGTON.**

For Enlargement of North of England Training College, Darlington. Mr. J. P. PATCHETT, Architect, Darlington. Quantities by the Architect.

**Accepted Tenders.**

Renshaw & Walker, brick, stone, plaster, and joiner . . .	£395 18 0
Wandley & Son, slater . . .	40 17 0
Smith, plumber and glazier . . .	48 0 0
Metcalf, painter . . .	7 9 0
Walker & Emley, heating . . .	10 10 0
Total . . .	£502 9 0

**GAWTHORPE.**

For the Erection of Boundary Walls to a Villa Residence, Gawthorpe. Mr. FREDERICK W. RIDGWAY, Architect, Dewsbury. Quantities by the Architect.

Tolson, Ossett . . .	£269 0 0
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**GREENFIELD.**

For St. Mary's New Schools, Greenfield, Yorks. Mr. MARSHALL ROBINSON, Architect, 19 Acresfield, Bolton. Quantities by the Architect.

**Accepted Tenders.**

Bourne, Greenfield . . .	£1,094 18 0
Carpenter and Joiner, Slater, Plumber and Glazier, Plasterer and Painter . . .	780 0 0
Hewkin Bros., Greenfield . . .	780 0 0
Concrete and Ironwork in Floors, &c. . .	279 0 0
Homan & Rodgers, Manchester & London . . .	279 0 0

**HANLEY.**

For Alterations and Additions to Grocer's Shop Premises, Parliament Row, Hanley, for Mr. B. T. RISELEY. Mr. AMERSON WOOD, Architect, Regent House, Hanley. Quantities by the Architect.

Tildesley . . .	£325 0 0
Redfern . . .	294 0 0
CORNES (accepted) . . .	235 0 0
Sambrook . . .	212 0 0

**HEALEY.**

For Additions to the Craven Heifer Inn, at Healey. Mr. J. T. LAW, Architect, Batley.

Baines, Batley, mason . . .	£87 0 0
Illingworth, Batley, joiner . . .	62 18 0
Kitchingman, Staincliffe, plasterer . . .	18 10 0
Thornton, Batley, slater . . .	10 10 0
Walker, Heckmondwike, plumber . . .	8 10 0

**HERNE.**

For Additions to Workhouse, Herne. Mr. BENJAMIN ADKINS, Architect, Faversham.

Cornelius . . .	£1,259 0 0
Coxens . . .	1,214 0 0
ADAMS (accepted) . . .	1,150 0 0

**IPSWICH.**

For Alterations and Additions to House, Fonnereau Road, Ipswich, for Mr. William Pretty. Mr. WILLIAM EADE, F.R.I.B.A., Architect, Post Office Chambers, Ipswich.

CATCHPOLE (accepted) . . .	£800 0 0
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For Extension of Wesleyan School Buildings, Alan Road, Ipswich. Mr. WILLIAM EADE, F.R.I.B.A., Architect, Post Office Chambers, Ipswich.

Tooley . . .	£325 0 0
Smith . . .	325 0 0
Wyatt . . .	318 10 0
Coe . . .	300 0 0
PELLS & SONS (accepted) . . .	276 14 0

For Alterations and Additions to Warehouse, Prince's Street, Ipswich, for Messrs R. D. & J. B. FRASER. Mr. WILLIAM EADE, F.R.I.B.A., Architect, Post Office Chambers, Ipswich.

Catchpole . . .	£730 0 0
Coe . . .	720 0 0
Thwaites . . .	719 0 0
J. B. & T. Bennett . . .	710 0 0
Pells & Sons . . .	700 0 0
Smith . . .	699 0 0
GIRLING (accepted) . . .	698 0 0

For Further Alterations to Same, next Friars Street. GIRLING (accepted) . . . 240 0 0

**LINCOLN.**

For Works in connection with the Minster Yard Improvement, Lincoln.

Binns . . .	£1,835 11 0
Copley . . .	1,722 12 0
Cowen & Lansdowne . . .	1,557 18 6
Dawson . . .	1,548 18 0
Otter & Broughton . . .	1,517 16 9
HAMPSHIRE (accepted) . . .	1,475 17 5

For Stables at the Irrigation Farm, Lincoln.

Cowen & Lansdowne . . .	£248 0 0
S. & R. Horton . . .	243 10 0
Harrison . . .	238 0 0
CROSBY & SONS (accepted) . . .	189 0 0

**LONDON.**

For Paving Waterloo Road, for the Vestry of St. George the Martyr.

Wheeler & Hindle . . .	£1,976 5 0
Rutty . . .	1,890 0 0
Evins & Son . . .	1,856 0 0
MOWLEM & CO. (accepted) . . .	1,710 0 0

For second portion or Additions to the Bakery at Dawes Road, Fulham, for the Albion Bakery Company, Limited. Mr. G. EDWARDS, Architect. Quantities by Mr. Henry Lovegrove, 26 Budge Row, E.C.

Green . . .	£1,557 0 0
Martin, Wells & Co. . .	1,550 0 0
Goad . . .	1,547 0 0
Stimpson & Co. . .	1,546 0 0
Farrant . . .	1,545 0 0
Scharien & Williams . . .	1,491 0 0

For Alterations and Additions to Nos. 266, 268, and 270 Liverpool Road, Islington, N., for Exors. of Sir J. B. Mansel. Mr. T. S. ARCHER, M.R.I.B.A., Architect.

White . . .	£573 0 0
Brown . . .	529 0 0
Picton . . .	427 10 0
HAINES (accepted) . . .	409 10 0

For Alterations, Repairs, &c., at Woburn Lodge, Upper Woburn Place, W.C., for Mr. H. H. Finch. Mr. ALFRED G. OLLEY, Architect and Surveyor, No. 94 Cannon Street, E.C. and Wimbledon.

Axford . . .	£876 0 0
Perkins . . .	830 0 0
BELHAM & CO. (accepted) . . .	750 0 0

For Additions to No. 31 Barrington Road, Brixton, for Mr. T. Catling. Messrs. MUGGERIDGE & POWELL, Architects.

Priestly . . .	£215 0 0
Cooke . . .	194 0 0
Nash . . .	175 0 0
G. & S. Fisher . . .	159 0 0

For Alterations to Nos. 22 and 24 Lower Kennington Lane, S.E., for Mr. WAYRE. Messrs. MUGGERIDGE & POWELL, Architects.

Broome . . .	£385 0 0
Dellarocca . . .	297 0 0
Hoare & Son . . .	294 0 0
Tyerman . . .	287 0 0
Quennell . . .	279 0 0
G. & S. Fisher . . .	269 0 0
PRIESTLY (accepted) . . .	240 0 0

For Repairs, &c., to the Gregorian Arms, Jamaica Road, Brompton, for Mr. Meacock. Messrs. MUGGERIDGE & POWELL, Architects.

Gibson . . .	£128 0 0
G. & S. Fisher . . .	94 0 0
G. & T. Riddell . . .	87 0 0
WHITBY (accepted) . . .	67 0 0

For the Erection of Camden Town Young Men's Christian Association Buildings. Mr. ALFRED R. PITE, Architect, 44 Bloomsbury Square, W.C. Quantities by Mr. J. Rookwood.

Hayward & Son . . .	£3,620 0 0
Manley . . .	3,497 0 0
Patman & Fotheringham . . .	3,492 0 0
Grover . . .	3,482 0 0
Falkner . . .	3,367 0 0
Williams & Son . . .	3,353 0 0
Toms . . .	3,346 0 0
Smith & Sons . . .	3,017 0 0

For new German Orphanage, for Baron Schroeder and the Committee. Mr. E. P. LOFTUS BROCK, F.S.A., Architect.

Carter & Son . . .	£2,293 0 0
Brass . . .	2,184 0 0
Downs . . .	1,992 0 0
Manley . . .	1,965 0 0
Grover . . .	1,933 0 0
Scrivener & Co. . .	1,864 0 0
Mattock Bros. . .	1,833 0 0
Brown & Roberts . . .	1,643 0 0

For Alterations to the Workhouse at Homerton, for the Guardians of the City of London Union. Mr. GEORGE JUDGE, Architect.

Burman & Sons, Enfield . . .	£10,199 0 0
Cox, Catford Hill . . .	9,731 10 0
Spratt & Smith, Pimlico . . .	9,236 0 0
Smith & Son, Paddington . . .	8,935 0 0
Grooms, Islington . . .	8,400 0 0
Lucas & Son, Kensington Square . . .	8,355 0 0
Priestley & Gurney, Camden Town . . .	8,350 0 0
Scott, London Wall . . .	7,997 0 0
Scharein & Williams, South Kensington . . .	7,950 0 0
Outhwaite & Son, East Smithfield . . .	7,930 0 0
McCormick & Sons, Canonbury . . .	7,900 0 0
J. & H. Cocks, Mile End Road . . .	7,890 0 0
S. H. & R. Roberts, Islington . . .	7,880 0 0
Kearley, Kensington . . .	7,848 0 0
Sawyer, Clapton . . .	7,777 0 0



**MATLOCK BATH.**

For Works in connection with the Water Supply, Matlock Bath.

<i>Laying Mains.</i>	
Young & Co., Wellstone, Southampton	£463 4 6
<i>Supply of Pipes.</i>	
Staveley Company	1,388 0 0
<i>Reservoir.</i>	
Palmer, Birmingham	1,255 0 0

**NORMANTON.**

For Building School and Class-room, Normanton. Mr. THOMAS REID, C.E., Architect. Quantities by the Architect.

J. Wilcock, jun., Pontefract	£664 0 0
Tattersall, Wakefield	587 8 5
Denison, Normanton	550 0 0
Gibson, Normanton (withdrawn)	495 0 0
Roberts and Watson, Leeds, bricklayer and mason	£250 0 0
Season, Leeds, slater	46 12 6
Gibson, Normanton, carpenter and joiner	130 0 0
Burns & Son, Castleford, plasterer	18 0 0
Beaumont & Daugill, Leeds, plumber, glazier, and iron-founder	37 3 0
Turner, Wakefield, painter	7 0 0

**PORTSMOUTH.**

For Sewers, &amp;c., Kingston Estate, Portsmouth.

Ward	£4,588 0 0
Tull	4,484 0 0
Light	4,185 0 0
Winter & Son	4,180 0 0
H. W. Farnimer	4,150 0 0
J. Farnimer	4,111 0 0
H. & W. Evans	4,090 0 0
Boulton	3,993 0 0
Baskett	3,911 0 0
Cooper	3,800 0 0
HAYTER (accepted)	3,640 0 0

**SOUTHAMPTON.**

For Making-up, &amp;c., of the Archer's Road, Northlands Estate, Southampton.

Nicholls	£770 15 0
Batten	727 15 0
Crook & Co.	700 0 0
Eutt	672 2 0
SANDERS (accepted)	639 0 0

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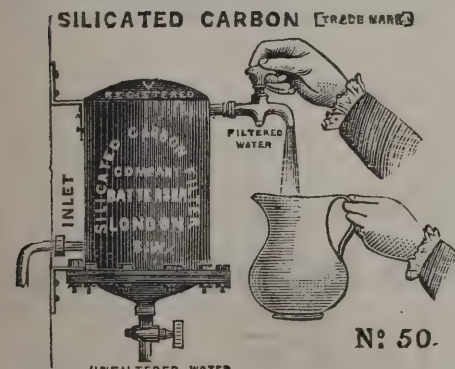
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For Building new Chapel, &amp;c., Holy Trinity Church, St. Helens. Mr. JAS. GANDY, Architect. Quantities by Architect.

Tickle	£1,382 0 0
Roberts	1,372 0 0
Harrison	1,246 10 0
Molyneux	1,244 12 0
Foster	1,160 0 0
ROTHWELL (accepted)	1,149 0 0
Buckley	1,028 13 0

For new Shop and Office Premises, for Mr. A. Dennett. Mr. JAS. GANDY, Architect.

Harris & Sons	£2,980 0 0
Rothwell	2,828 0 0
Roberts	2,770 0 0
HARRISON (accepted)	2,748 10 0

**SURREY.**

For Additions to Pickhurst, Surrey, for Mr. John Ryde. Mr. J. M. BEYDON, Architect, 5 Cambridge Place, N.W. Quantities by Messrs. Franklin &amp; Andrews.

	House.	Stables.
Birch, Kingham & Co., Farnham	£3,605	£980
Martin, Wells & Co., Aldershot	3,512	899
Pink, Milford	3,340	939
Jarrett, Croydon	3,263	937
Elliott, Newbury	3,137	830

ELLIOTT'S amended estimate, including additional works (accepted), £4,600.

**SWINDON.**

For Erection of Houses in South Street, Swindon, Wilts, for Mr. W. Affleck. Bricks and Stones supplied free of cost to Contractor. Mr. WILLIAM DREW, Architect, Surveyor, &amp;c., Swindon.

Jackson	£825 0 0
Wiltshire	810 0 0
Stratford	800 0 0
Barrett	765 0 0
HENLEY, Swindon (accepted)	760 0 0

**TREDEGAR.**

For Additions and Alterations to Workhouse, Tredegar. Messrs. BLESSLEY &amp; ASPINALL, Architects, Cardiff.

Welsh, Hereford	£4,650 0 0
Davies, Cardiff	4,600 0 0
George, Briton Ferry	3,993 0 0
Vaughan, Tredegar	3,979 0 0
Leonard, Tredegar	3,962 6 0
MORGAN, Tredegar (accepted)	3,960 0 0

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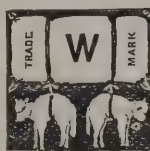
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For Private Street Improvements in the Township of Urmston Contract No. 16, consisting of the Sewering, &amp;c., of Railway Road, and Contract No. 17, consisting of the Sewering, Forming, &amp;c., of Chadwick Lane and Buck Lorne Grove (West). Quantities supplied by the Engineer, Mr. JOHN PRICE, Assoc. M.I.C.E.

Contract No. 16.

Pollitt, Bolton	£1,352 1 6
Snap & Sons, Eccles	1,263 15 0
Cowburn, Hindley	1,225 0 0
Holt, Miles Platting	1,222 1 2
Unsworth, Moss Side	1,220 4 10
Randall, Weaste	1,189 17 2
Naylor, Hulme	1,158 15 0
Hayes, Bolton	1,119 1 2
Oakes, Kearsley	1,034 14 6
Bird, Chorlton	1,098 0 0
WORTHINGTON, Rusholme (accepted)	982 7 0
Engineer's estimate	1,012 0 0

Contract No. 17.

Oakes, Kearsley	474 9 6
WORTHINGTON, Rusholme	454 2 7
Holt, Miles Platting	445 17 0
Unsworth, Moss Side	429 9 8
Cowburn, Hindley	426 0 0
Pollitt, Bolton	423 6 11
Randall, Weaste	407 3 9
Naylor, Hulme	402 12 0
Snap & Sons, Eccles	393 15 6
Hayes, Bolton	375 12 9
BIRD, Chorlton (accepted)	360 19 0
Engineer's estimate	380 0 0

**WELLINGBOROUGH.**

For Building Post Office in Church Street, Wellingborough. Mr. EDWARD SEARMAN, Architect.

Marriott	£1,470 0 0
Underwood	1,362 0 0
Harrison & Hackley	1,298 0 0
Abbott	1,279 0 0
Henson	1,270 0 0
BROWN (accepted)	1,256 0 0

**WIDNES.**

For Main Sewerage Works, Widnes.

Rayner, Bootle	£8,953 8 8
Slinger, Cleckheaton	8,448 5 9
Cowdery, Newcut, Gloucestershire	8,297 1 0
Evans & Lewin, Ditton	8,124 3 4
Williams & Jones, Rhyl	7,863 15 0
Fawkes Bros., Southport	7,635 6 4
Cowburn, Hindley	7,437 0 0
Matthews, Widnes	7,218 17 3
Hirst, Widnes	7,195 4 10

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They also invite the particular attention of the trade to their IMPERIAL PATENT BLIND LINES, which are very superior to anything yet offered.

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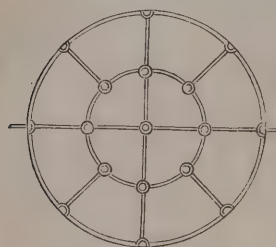
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PADDINGTON IRON WORKS, LONDON, W.,

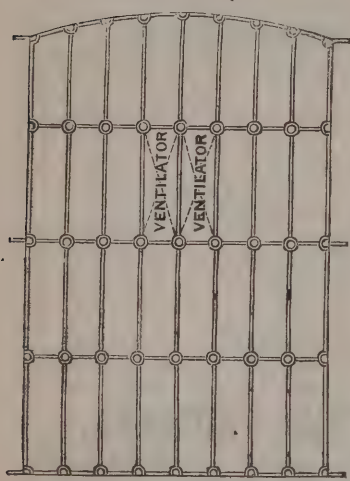
AND SANDYMOUNT FOUNDRY, LLANELLY, CARMARTHEN.

**PATENT WROUGHT-IRON SASHES WITH WROUGHT BOSSES**

SPECIALLY ADAPTED FOR WAREHOUSES, SCHOOLS, AND PUBLIC BUILDINGS.



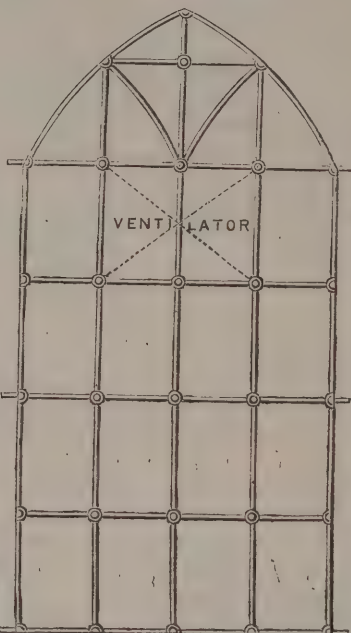
CABLE LIGHT



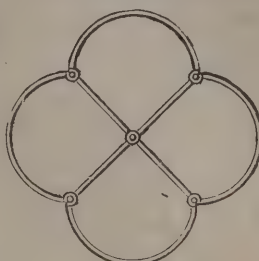
CLOSE BAR SASH (obviating use of Window Guards.)

The Patentee begs to call particular attention to the great strength of this construction. The Bars and Bosses, being of malleable wrought iron, form an exceedingly firm joint at the intersection of bars. They are durable, and of light appearance, the Bosses being small and not unsightly. They can be made at very short notice, and at the price of an ordinary cast iron sash.

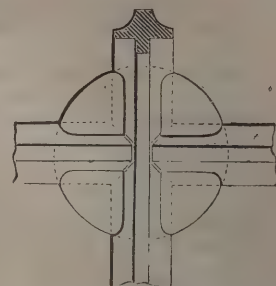
PRICES UPON APPLICATION.



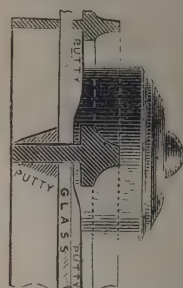
ORDINARY WAREHOUSE AND SCHOOL SASHES.



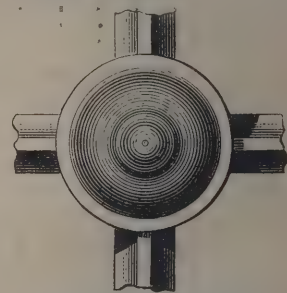
CABLE LIGHT.



Back view of Boss, full size.



Section through Boss, full size.  
These can be glazed flat, like ordinary wooden sashes, without the corners of the panes being chipped off.



Front view of Boss, full size.  
Obscuring no appreciable light.

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 Saturday, August 18, 1883.



# The Architect.

## ÆSTHETIC VIEWS OF DRESS.



**L**HOLIDAY-TIME seems a fitting time for saying a word upon any subject of light and airy interest. Such a subject, wholly artistic—for it is only the artistic aspect of the question which we would dare to entertain—is to be found at the present day in the article of dress. A great deal is being said about dress. A public Association exists for the purpose of agitating about it. The way in which we make our clothes, and put them on, and deal with them altogether, is pronounced by many earnest and thoughtful people to be so wholly bad, so unsuitable to our conformation, so detrimental to our business, so prejudicial to our health, and so discreditable to our taste, that they don't know what to do with us. Men's dressing and women's dressing alike are entirely objectionable, and alike demand immediate and radical reform. In such circumstances we do not suppose that argument of anything like an architectural character would be able to secure attention, or, having haply secured it, could hope to succeed in overcoming the difficulties which surround the problem; but nevertheless, there is one very simple, and, we think, very sound reason why something not unlike architectural argument ought to be fairly tried amongst the rest. For, as we have ventured to assert on more than one occasion, architecture fulfils a peculiarly important function in these days, in being the best basis for the study of decorative-constructive art of all kinds whatever; and costume properly considered—or we are very much mistaken—is a decorative-constructive art and nothing more. The principles of criticism, therefore, upon which the handling of both the useful and the ornamental elements proceeds in the matter of building up a house may not unlikely be found, if only in an indirect rather than a direct way, to suggest corresponding principles for even such a matter as the building up of a costume—in other words, the ornamental clothing of a man or a woman.

It need not surprise anyone who is accustomed to observe the odd turns and twists of the revolutionary movements of mankind when we point out the curious fact that, amongst our English dress reformers, gentlemen are found to be of opinion that male attire ought to approach existing feminine forms, while ladies no less are disposed to think the costume of their sex ought to borrow something from that of the other. This incident only shows that both styles of the dressing art are very much in the right, if both are a little in the wrong. Is it not so, after all, in most things—perhaps in everything? When SAM WELLER quotes the maxim, "Whatever is right," he indicates, as all moderately wise persons well know, the great and everlasting truth that the decrees of fate are the necessary and appropriate consequences of the conditions of the time, and work out the greatest good of the greatest number. Evolution claims even our garments for its own; the survival of the fittest is still the rule of development; and breeches will keep possession of the world when bloomers are forgotten and divided skirts an exploded superstition.

Now why it is that a gentleman wears the precise garments he does (speaking of essentials), and a lady the wholly different articles which are assigned to her, it is perfectly useless to inquire. The distinction, in very much the same form, is found to exist in all civilised nations, and to have existed from sufficiently remote antiquity, exceptions only proving the rule. Those objectors, therefore, who would exchange the first principles of our attire would be only running counter in some way to the first principles of our nature, were it not that their desired exchange really goes no further, whether they know it or not, than a suggestion that certain points of neutral ground might be a little more freely occupied by both the one sex and the other for the sake of the convenience of each. But this may be conceded without doing either much harm or much good; it has only to be borne in mind that the concession must not be considered to involve any confusion of those essentials of custom which, being universally established as they are, are placed beyond the reach of profitable debate.

There is one remarkable difference between male dress and female, which cannot be too soon adverted to. It is said that there are men, chiefly young, who are able to perceive in the masculine attire of the passing moment a considerable diversity of design, where to the eye of others there is nothing but universal uniformity. But when we come to the attire of women, who can fail to see the almost infinite variety of pleasing effects which it is capable of displaying? There are actually books published season by season, and even journals week by week, in which, to the eye of the mere philosopher, the multitudinousness of the examples of artistic feminine clothing, all equally good of their kind, is simply overwhelming; whereas it is not too much to say that no corresponding collection of garments masculine has ever reached, or ever could reach, beyond the limits of a common tailor's show-card, which, to all appearance, nobody ever looks at except as a trade-sign. The reason for this lies in two directions. First, there is the more artistic intelligence of women; but secondly, there is the more available artistic character of the mode of dress which they have universally adopted. Again, therefore, we conclude that the first principles of dress are right: certainly for women, and why not for men? We are consequently in every way disposed to say, further, that the philosophy of dress really consists, not in any inquiry by amateurs into the elementary suitableness of the garments which we use, but in an artistic criticism of the various designs which are from time to time offered by experts for public acceptance as successive fashions.

An æsthetic dress, properly so called—and now we come to the quasi-architectural ground of decorative-constructive art—ought consequently to be such a design, on the accepted principles, as shall be appropriate to these several conditions—namely, the object of clothing, the climate, the season, the individuality of the wearer, the nature of the materials, and so on, not forgetting that natural sequence of superficial change, for the mere sake of change, which constitutes in dress, and not in dress alone, the general mode of one year after another.

One of the first questions of design is this: Is the effect of the costume to be natural, or artificial, or a combination of the two? Perhaps the best illustration of this question is to be derived from landscape gardening. We have the natural style of treatment, known as the English, the wholly artificial style, known as the Italian, and between the extremes of these there are any number of stages of combination and compromise. Now let us turn to the attire of a little schoolgirl in any of its very simplest forms, and probably there is no critic who would object to regard it as a fair specimen of the natural style of costume. As a proof of this, it may be said to undergo no change from age to age, except in the very slightest concessions to the changes of adult fashions. The natural shape of the child-woman, in all its native grace, is unconcealed if undisplayed, and the verdict is frequently extorted from the most unwilling judges that all the resources of art are unequal to the production of its equal. The same may be often said with regard to women of mature age and proportions, who, as a condition of their unconventional sphere of life, are clothed on the same principles. Out of this, then, the natural style may be said to be developed, and, when well done, the result must always be charming. For the artificial style, on the other hand, in its most characteristic exemplifications, we have only to look at such elaborate productions as the well-known devices of Queen ELIZABETH'S time. Every feature of the human frame is conventionalised, as we may say, to the utmost. Yet the effect of the artistic design may be in its way, and ought to be, most admirable. Like the terraces, balustrades, parterres, fountains, and all the rest of the "Italian garden," everything combines to substitute the artificial for the natural, and the whole becomes as pretty as a wedding-cake. Between the extremes thus indicated it is obvious that an illimitable range of intermediate combinations may be made available; and indeed it is in this field that almost all the genius of modern *modistes* has to operate. That is to say, the artistic criticism of a lady's dress nowadays must take the form of an inquiry, first, whether its naturalesque elements are sufficiently natural; secondly, whether its artificialism is appropriately artificial; and thirdly, whether the combination produces harmony or discord. Of course we do not pretend to say that it is enough to lay down such a law; but there is at least this to be said, that without some such law criticism must be in chaos.

When fashion involves a positive distortion of the figure, as in the case of lacing the waist, criticism of this artistic nature



still need not be at fault. It is probably an indisputable fact that women of sedentary habits generally require what they call "a support"; even such wild people as foxhunters—men—doing violence to themselves in quite another way, have to resort to very much the same expedient; but it is as a conventional artificiality in most instances that women really tamper with the waist, and as a means of emphasising a natural outline which cannot be denied to be one of the particular charms of the human form. It is idle, therefore, to denounce *in limine* the practice of having or making a waist; all that is desirable is that it should be kept strictly within its proper limits; and of course those limits ought always to be considered to recognise the question of health. To speak plainly, an expert designer of dress can deal as easily with a robust figure in a fine lady as an architect can deal with massive proportions in a church tower, and it is simply bad art to lace all the world tightly because perhaps two or three leaders of fashion are abnormally slim. In fact, in the opinion of the great majority of observers, a tight waist, or even a too slender waist, is beyond all doubt a blemish; and this of itself is proof positive on the point of taste.

The old-fashioned architectural rule of "fitness" is one that may be applied to costume with confidence. But fitness here means a great deal more than may at first sight appear; for it involves a reason for everything, and that the right reason. At the same time it implies to the artistically-trained intelligence what is almost much less than it would be thought to mean. Within admissible limits, there is no restriction whatever as to variety of device in dress; but one principle must never be lost sight of, that, however capricious the variety may be, the resources of design, if expertly administered, need never fail to produce, with harmony of outline, colour, and character, unvarying elegance and grace.

#### THOMAS WARTON.

THE credit is generally given to WALTER SCOTT of having made Mediævalism popular in England, and with reason it may be said that the revival of Gothic architecture was one of the results of the publication of "The Lay of the Last Minstrel" and "Marmion." But there was another poet before SCOTT whose influence as a factor in the revolution is too generally overlooked. The motto on the title page of the "Border Minstrelsy," with which SCOTT began his noble career of authorship, was taken from one of the odes which THOMAS WARTON produced in virtue of his office as Poet Laureate. It would not be difficult to show that in other and more important ways SCOTT was also indebted to WARTON; in fact, he has acknowledged his obligation. WARTON was not only the first scholar trained in an university who dared to show a liking for the ancient poetry of England, but he was probably the only Englishman of his generation who was able to appreciate Mediæval art. It should be remembered, too, that he was brought up amidst surroundings that were adapted to instil in his mind the prejudices against that art which were characteristic of the Oxford don of the eighteenth century. WARTON's father had been professor of poetry in Oxford, and was besides a fellow of Magdalen College, probably at the same time as ADDISON. THOMAS WARTON entered Oxford when he was sixteen (he was born in 1728), and for forty-seven years he was connected with his college. At that time, every one who had the least claim to the possession of so-called taste was an exclusive admirer of what had been produced in literature and art, and especially in architecture, by Greeks and Romans. ADDISON, whose word was law in the common-rooms of Oxford, was of opinion that a man's taste might be estimated by the extent of his dislike of Gothic buildings. "Let any one," he wrote, "reflect on the disposition of mind he finds in himself at his first entrance into the Pantheon at Rome, and how the imagination is filled with something great and amazing; and, at the same time, consider how little, in proportion, he is affected with the inside of a Gothic cathedral though it be five times larger than the other, which can arise from nothing else but the greatness of the manner in the one and the meanness of the other." What was said by ADDISON corresponded with the opinion of the time, and Gothic architecture was held to be the fitting representative of a dark and superstitious age, and unworthy of the notice of the wits and scholars of the eighteenth century. It was in those days the belief of men who were supposed to be cultured that "elegant antiquity,"

meaning Greek and Roman remains, necessarily engaged attention from its intrinsic excellence; whilst "barbarous antiquity," that is, Mediæval work, ought not even to be looked at, lest custom should make people approve of what they ought to avoid.

While his contemporaries held those opinions it was strange to find a young poet professing to seek inspiration in Gothic churches. Yet this is what THOMAS WARTON ventured to do in "The Pleasures of Melancholy," which he wrote in his seventeenth year. One passage will suggest his mode of thought:—

The tapered choir, at the late hour of prayer,  
Oft let me tread, while to the according voice  
The many sounding organ peals on high,  
The clear, slow-dittied chant, or varied hymn,  
Till all my soul is bathed in extasies  
And lapped in paradise. Or let me sit  
Far in sequestered aisles of the deep dome,  
There lonesome listen to the sacred sounds  
Which, as they lengthen through the Gothic vaults  
In hollow murmurs reach my ravished ear.

It is not necessary for us to determine the value of the lines as a piece of poetry. CAMPBELL considered that the poem from which they are taken gave promise of more sensibility than was afterwards fulfilled by the author. But they may be said to be unique, for it would be impossible to find an extract in the poetry of that age which expressed as much admiration for an English Gothic church. Soon afterwards WARTON ventured to oppose the project for filling the window of the Chapel of New College with painted figures in the modern academic style. He knew that REYNOLDS, although he might be equal to TITIAN as a painter, was unfitted for the task. With some tact he made it appear that it was only the delight of a dreamer, like himself, which was involved, one who did not profess to be a fine gentleman, but who used

With Gothic manners Gothic arts explore,  
And muse on the magnificence of yore.

And then he went on to relate some of his own experiences:—

Enraptured have I loved to roam,  
A lingering votary, the vaulted dome,  
Where the tall shafts, that mount in massy pride,  
Their mingling branches shoot from side;  
Where elfin sculptors, with fantastic clue,  
O'er the long roof their wild embroidery drew;  
Where Superstition with capricious hand,  
In many a maze the wreathed window planned,  
With hues romantic tinged the gorgeous pane,  
To fill with holy light the wondrous fane;  
To aid the builder's model, richly rude,  
By no Vitruvian symmetry subdued,  
To suit the genius of the mystic pile;  
Whilst as around the far retiring aisle  
And fretted shrines, with hoary trophies hung,  
Her dark illumination wide she flung;  
With new solemnity, the nooks profound,  
The caves of death and the dim arches frowned.

The description of an interior we have quoted may appear to be wanting in precision, but it is perhaps an impossibility, when dealing with a building, to be poetic and technically correct at the same time. SCOTT, with all his archaeological lore, was unable to accomplish the feat. In his most elaborate word-picture he could only represent the forms of Gothic tracery by suggesting that osiers had been twined in freakish knots and then by some fairy's hand changed into stone. It is not improbable that WARTON was ignorant of the terms which are used by architects and workmen to describe the various parts of a Gothic building, and when in one of his poems he says:—

Here ancient art her dædal fancies play'd  
In the quaint mazes of the crisped roof;  
In mellow glooms the speaking pane array'd  
And rang'd the cluster'd column massy proof,

he was unable to find better words than "crisped," "dædal," and MILTON's "massy proof," to express certain qualities which he admired. WARTON's archaeology was bookish, and was therefore likely to be vague at times, if not absurdly wrong. He once took great pains to explain that when SALADIN was said to carry a "faucon brode," it meant a falcon bird, and was a sign of contempt for the Christian warriors. A man who was not a scholar would have interpreted rightly the



phrase as meaning a broad falcion, a thing that was not out of place if carried by a Saracen. On the other hand, it may be said that if he avoided precise terms, he was merely observing the canon which prohibits the use of technicalities in poetry. MILTON, he knew, had been condemned by the critics for introducing such words as frieze, cornice, pilaster, and architrave.

In his prose writing WARTON was less restricted than in his poetry. It was almost a matter of necessity that he should attempt blank verse and rhyme, but he was able to speak more plainly in prose, and from it we can understand his sentiments plainly. We are told that during the vacations he was an explorer of architectural monuments, and that he made it a rule to record his remarks. But of the value of his researches it is not possible to judge, for his notes have not been printed. CAMPBELL seems to think that what gave value to a building with WARTON was the poetic or historic associations, and accordingly doubts "whether he would have ever looked with interest on a shepherd's cottage if he had not found it described by VIRGIL or THEOCRITUS." But cottages, whether classical or English, do not appear to have had much attraction for WARTON. Among secular buildings, nothing less than a castle was worth his notice. When he saw Windsor Castle for the first time he was overpowered by the spectacle, and even CAMPBELL has to admit that WARTON can be impressive when sketching the appearance of an ancient Gothic castle. He then became picturesque, and was as careful in selecting his point of view as if he were a landscape painter. WARTON knew the importance of leaving something to the imagination by making a part suggest the whole. MILTON's lines—

Towers and battlements it sees  
Bosom'd high in tufted trees,

were therefore to him not only perfect in expression, but descriptive of the characters he most admired in English domestic architecture. Here is his comment on the passage:—

This was the great mansion-house in Milton's early days, before the old-fashioned architecture had given way to modern arts and improvements. Turrets and battlements were conspicuous marks of the numerous new buildings of the reign of King Henry VIII., and of some rather more ancient, many of which yet remained in their original state unchanged and undecayed; nor was that style, in part at least, quite omitted in Inigo Jones's first manner. Where only a little is seen, more is left to the imagination. These symptoms of an old palace, especially when thus disposed, have a greater effect than a discovery of larger parts and even a full display of the whole edifice. The embosomed battlements, and the spreading top of the tall grove on which they reflect a reciprocal charm, still further interest the fancy from novelty of combination; while just enough of the towering structure is shown to make an accompaniment to the tufted expanse of venerable verdure, and to compose a picturesque association. With respect to their rural residence there was a coyness in our Gothic ancestors. Modern seats are seldom so deeply ambushed. They disclose all their glories at once, and never excite expectation by concealment, by gradual approaches, and by interrupted appearances.

It will be seen that WARTON considered the English houses of the eighteenth century were less fitted to excite agreeable associations than the more ancient houses. In a similar spirit he maintained that even the greatest example of the Church architecture of the eighteenth century—the Cathedral of St. Paul's—was not so awe-inspiring as its predecessor:—

Old Saint Paul's Cathedral, from Hollar's valuable plates in Dugdale, appears to have been a most stately and venerable pattern of the Gothic style. Milton was educated at Saint Paul's School, contiguous to the church, and thus became impressed with an early reverence for the solemnities of the ancient ecclesiastical architecture, its vaults, shrines, aisles, pillars, and painted glass, rendered yet more awful by the accompaniment of the choral service. Does the present modern church convey these feelings? Certainly not. We justly admire and approve Sir Christopher Wren's Grecian proportions. Truth and propriety gratify the judgment, but they do not affect the imagination.

WARTON must have forgotten the passages he read in the Elizabethan dramatists about Old St. Paul's. There was not an ecclesiastical building in Europe which was more degraded. While Paul's Walk was the haunt of the worst characters, neither the length nor the style of the building could be sufficient to create reverence in men's minds. The studious cloisters, high embowered roof, and storeyed windows which MILTON loved need not necessarily have belonged to the Old St. Paul's; they were to be found in many parts of the kingdom,

and were only some of the features common to Gothic buildings which were calculated to attract a poet's observation. But enough has been said to suggest that WARTON was one of the pioneers of the Mediæval revival. It has been stated that his fondness for the beauties of architecture was an absolute passion: if so the passion was concentrated on one form, and that was English Gothic.

## PARIS NOTES.

ALL the works in the painting and sculpture sections of the Triennial Salon have already been sent into the Palais de l'Industrie, and for the present are lying about the floors of the building in great confusion. The whole of the centre part of the great nave devoted to the sculpture exhibits is being laid out as a garden, with grass plots, shrubberies, &c.; and this novel and most agreeable way of exhibiting the statuary amid flowers and verdure will probably prove one of the chief attractions of the Salon. The most noteworthy exhibits to be seen in the great triennial exhibition will certainly be the works of the great painters who have not lately taken part in the annual Salons, such as Jules Dupré, who sends eight pictures hitherto unknown to the public; and M. Meissonnier, who contributes the following: *A Reconnaissance by Dragoons of the Republican Army in the Black Forest*, sold recently to M. Crabe, the Belgian amateur, for 300,000 frs.; *Le Concert*, a woman singing while a man is accompanying her on the spinet; *La Visite au Château*, which contains more than thirty small figures, many of them portraits; *The Interior of St. Mark's, Venice*, with a solitary figure; and the portraits of M<sup>me</sup>. Mackay and of M. Lefranc, already seen at the Cercle des Mirlitons. Among the sculptures a *Mozart Jeune*, by M. Barrias, is generally spoken of as a masterpiece.

André Gill, the celebrated caricaturist, whose brain has been so affected for some time past that it was found necessary to confine him in the Charenton Asylum, appears to be showing signs of returning sanity. Being visited lately by M. Emile Cohl, one of his old fellow-artists, he begged him to endeavour to obtain for him a separate room, in which he might resume his literary and artistic labours, hoping thus to recover the full possession of his reason. The manager stated that he might authorise the artist to occupy a room for which he would have to pay 75 frs. per month. A collection made by M. Cohl for that purpose has now enabled poor Gill to have, not only a room, but a servant; and a fund has now been started to make the arrangement permanent, subscriptions to which may be sent to M. Cohl at his residence, 36 Boulevard Henri IV., Paris.

The Academy of Fine Arts has received from the Ministry of Public Instruction the first volume of the general inventory of French art treasures, now in course of preparation. This first portion of the work is devoted to the public monuments of the country.

The jury of the Munich International Exhibition of Fine Arts has awarded first-class medals to the following French artists: For painting, to MM. James Bertrand, Bastien Lepage, and Emile Rénouf; for sculpture, to M. Strax; for architecture, to the French Commission of Historical Monuments. Second-class medals have likewise been bestowed upon MM. Echtler, Aublet, Courbois, Dantan, Gervex, Luminais, Santin, and Tattegrain, painters, and upon M. Beruvier, architect.

Three fine marble statues have been lately placed in the empty niches on the ground-floor of the northern front of the Louvre. They are a *Venus*, by Vilain, with a rose in the right hand and the torch of love in the left; *Campaspe undressing before Apelles*, by Ottin; and *Venus Triumphant*, holding the trident of Neptune, by Devoux.

The Duc de Camposeliée has offered for the Ischia tombola, or lottery, now being organised by the French press, a bronze statue of *Music*, considered the masterpiece of the sculptor Delaplanche, and the Duchess has subscribed 10,000 frs. to the fund.

An amusing dispute has arisen between the Paris municipal authorities and M. Auguste Vitu, an eminent journalist. On the front of the house standing at the corner of the Rue St.-Honoré and the Rue de Valois, a marble slab has lately been placed, with an inscription which stated that there stood the theatre of the Palais-Cardinal, built by Le Vau in 1641, occupied by Molière and his company from 1661 to 1673, and used for some time as the headquarters



of the Royal Academy of Music. M. Auguste Vitu maintains that the inscription is wrong, as neither the Palais-Cardinal theatre nor any other portion of the palace ever occupied the site. It is also said that Le Vau did not build either the theatre or the Palais-Cardinal, and, finally, the theatre that was opened on the site in 1770 for the Royal Academy of Music was never once used by Molière or his company. M. Vitu attributes the construction of the Palais-Cardinal, not to Le Vau, but to Le Mercier. The theatre was in the right wing of the palace. Molière and his company enjoyed the use of the great hall in the Palais-Royal from 1661 until the death of the poet in 1673. M. Henri Martin, president of the Municipal Inscription Committee, is now compelled in self-defence to bring forward the documents upon which he relied for the text.

Another street of old Paris has been obliged to abandon its time-honoured name. The Rue Tiquetonne, in the St.-Eustache quarter, will be known henceforth (or until another name is substituted) as the Rue du Petit-Lion-Saint-Sauveur. The name of Tiquetonne had a curious origin. During the fourteenth century, at No. 7 of the street stood a pastrycook's, with the sign "Rogier de Quiquetonne, Seigneur de la Fournée," and, underneath, the picture of a cook carrying a sword and yet engaged in making cakes. This establishment had a universal reputation, and it was the fashion to repair thereto in the afternoon to eat honey-cakes. It thus gradually became the rendezvous of all the great people of the Châtelet, St.-Eustache, and St.-Opportune quarters, and when the ladies had arrived, and the young bloods began to put in an appearance, the great Sir Rogier de Quiquetonne (he was really of noble birth) came out in his gaudy dress, with sword by side, to wait upon his high-born customers. At the time of the revolution of the Maillots, the house was attacked by the mob and pillaged. The provost of the merchants, being informed of this, awarded Rogier a handsome compensation, and changed the name of the street to Quiquetonne, which afterwards became corrupted into Tiquetonne.

For many years past the beautiful belfry of the Church of St. Merri, in the Rue St.-Martin, has been threatened with destruction through the ravages of time. Various efforts have been made to strengthen the tower, the removal of which would entail the mutilation of one of the purest and most beautiful specimens of Gothic architecture in Paris. These have, unfortunately, proved ineffectual, and, in consequence of its precarious state, it has been found necessary to order the demolition of the upper part, which will be temporarily replaced by a wooden roof. In the meantime the city architects have been requested to make out plans for the restoration of the part removed in keeping with the character of the edifice.

## ENGLISH AND FOREIGN SYSTEMS OF ART TEACHING.

THE following comparison between the English and Continental systems of teaching is by Mr. T. Armstrong, the Director for Art at South Kensington:—

First, I would call attention to certain conditions under which art teaching is carried on in these countries which are, I consider, more favourable than ours. In all of them the working classes can, and in some do, give up the Sunday to art work. In Saxony and Bavaria the Sunday teaching is certainly a most powerful factor, and, although we saw no classes at work in France, I was present in Paris at a competition in drawing and modelling in which 360 workmen took part between nine and five on a Sunday. I am not called upon, I know, to give an opinion as to the expediency of using Sunday in this way, but it is clearly a great gain to have a free day on which all working men can come together for competition. In Germany, Sunday is the great day for instruction in the Fortbildung School, and we were told that it was a common practice for masters to set their apprentices and workmen at liberty to attend art classes on Thursdays in the afternoon.

In no instance did we find anything equivalent to the management of our schools by voluntary committees. They were in all cases under the direction and control of a central authority, either the State or municipality, which was able both in France and Germany to provide itself with a competent staff of inspectors and directors through the high academical teaching and discipline which is traditional. This is especially the case in France, where a noble tradition of art teaching is preserved by the Académie des Beaux-Arts, a body which is in no way mixed up with commercial interests, and is thus free to maintain the highest view of art instruction. From this source are obtained officials for the direction of art schools, and museums who have had the best possible train-

ing. The art masters of many provincial schools in France are yet, it is admitted, far below the standard it has been thought desirable to fix, and great efforts are being made to fill up vacancies as they occur with well-trained teachers, holding diplomas.

In all the towns we have visited except Lille there survive art traditions such as do not exist in London, Glasgow, Manchester, or other large towns in this country. Worcester and some of the older pottery towns may have some such traditions, but I do not know that it is so. Paris has long produced largely, not only for its own adornment but also for export, articles which derive their value from dainty and artistic workmanship. The Parisian workman has for many generations been in contact with buildings decorated externally with good sculpture, and internally with wall paintings, with wrought metal and marble carvings. In the ceremonial of the churches he has, besides, been familiarised with the most beautiful woven stuffs which are used for sacerdotal vestments. Out of doors he has been accustomed to see good statues in the public gardens.

On Sundays he has been able to visit museums containing not only good pictures, but beautiful furniture, and the choicest examples of decorative art. London workmen can now see such in the South Kensington Museum if they care to go so far when the day's work is over, but they cannot see them on Sunday. The Paris workman and his father and grandfather have had these opportunities, and, besides, have lived in a sort of artistic atmosphere which cannot exist in towns where the people engaged in art work are few and scattered, and where there is not the sort of stimulus which comes of sympathetic surroundings, nor the direction of another stratum of art-workers trained under such auspices as those of the Ecole des Beaux-Arts.

In Munich there was during the reign of King Louis a lavish expenditure on works of art, on art teaching, and on pageants carried out under the direction of accomplished artists. The moderate size of the town allowed of the inhabitants getting familiarised with the practice of decorative art without going far from their homes. In Dresden there has been for 200 years an art manufacture which has been a source of pride and profit to its inhabitants, and fine examples have been accessible to them in the gallery of pictures and the other royal or national collections. In Nuremberg there is a survival of the art manufactures for which it was famous centuries ago, debased it may be, but still living.

I have insisted on this point at some length because I do not think it is fair to our system of teaching to judge it from results produced on populations raw and unprepared to receive impressions of beauty, and, from want of familiarity, not eager to come towards fine examples, with other systems applied to people who are prepared unconsciously, not only in their own early years, but congenitally through several generations of ancestors. I do not believe that the French peasant, and still less the German, is more easily trained to be an art workman than the English peasant, nor do I think the bourgeois class in Paris superior in that respect to a similar class in London; but the artist and the art workman in Paris, in Munich, in Dresden, and in Nuremberg, has the start of us, and it would be foolish not to realise that, in some respects, we carry extra weight in the race. These hindrances in the race of competition with our neighbours are what, I take it for granted, we must bear for the present, and perhaps for some time to come; for we cannot teach the dead grandfathers of our potters and cabinet-makers, and the Sunday work cannot be looked to.

We did not find in either France or Germany anything resembling our system of combined payment by fees and results, a system which certainly appeals to the strongest motives for human endeavour. It is not to be hoped that the average art master will neglect the commercial interests of himself and his family, if he have one, when he can, with credit to himself and his school in the eyes of the outdoor world, choose those grooves to run in which most easily bring payments to himself and prizes to his pupils. It is not fair to ask more of human nature. The endeavour, therefore, of the department has been, and must be, to so adjust the stimulus of its payments as to encourage sound methods of instruction.

The point in the German art teaching which struck us most, and from which there is, I believe, much to be learnt, is the preparation in the elementary schools for the teaching in the art schools. If freehand drawing ought to be taught at all in our elementary schools, every effort should be made to render the teaching more efficient. At Lord Spencer's request I made three visits to the Normal School in Marlborough Street, Dublin. There the master showed me that the time given to freehand drawing was too short to be useful. This would not appear from the papers of the school, but I found it out through his making the children in different classes declare, by holding up their hands, how many of them actually had the time allotted to drawing in the programme. I fear this is so also in many English schools. As drawing is not taught in 75 per cent. of our elementary schools, the boy of the artisan class who comes to the art school is with us almost always mere raw material; in Saxony and Bavaria he is universally trained to neatness of handwork, if to nothing more. There is clearly work to be done by us in this direction.

Some three or four months ago the London School Board engaged Mr. Ablett as inspector and teacher of the art of teaching



*pédagogie*, as the French call it. Mr. Ablett, under our department, has succeeded in producing extraordinary results at the Bradford Grammar School by systematic teaching. He is a man of great intelligence, with a love of teaching, and I hope we may soon see some results from his appointment. At present the winner of a certificate is not bound to show his power of imparting to others the skill and knowledge by which he has earned the distinction. Drawing under the present arrangement in the elementary school is not always profitable to the teacher, who can often obtain higher payment on results more easily in other subjects, and I believe (but of this I have no direct evidence) that on this account the time allotted on the programme to drawing is often taken for other subjects. If it should be thought expedient to teach drawing more efficiently in elementary schools, I should much like to introduce a system by which the best students should on leaving, by way of reward, be granted free instruction in the art classes or schools of art. This linking of the elementary to the advanced teaching has been suggested by Mr. Ablett, and I think much might be made of it. With improved teaching of drawing and more of it in our elementary schools we shall provide for the children of to-day, but in the meantime I should like something to be done for those who have grown up with no instruction at all.

It is quite certain that in most of our large towns not one-tenth of the number of those artisans who would be all the better workmen for some knowledge of and practice in drawing or modelling come to our schools or art classes. We should try to attract them, and for them some modification might perhaps be made in our system, which is, I think, more adapted to the wants of young people who may hope to enjoy continuous art education for some years, and who are from their stations in life somewhat delicate-handed, than to those of workmen who, after handling hammers, trowels, and saws all day, come to get their little training as draughtsmen at night.

Perhaps bolder and larger examples and a somewhat rougher method of execution might be introduced with advantage for these. A workman with a good eye and fair natural aptitude for seeing and rendering form who comes to draw as an evening student is, it seems to me, from the nature of the occupation at which he has been all day, somewhat disabled from copying neatly the small forms of our examples. At any rate I should like to try the effect of larger and coarser examples on this class, if we can get them to come in greater numbers to our schools. There can be no question as to the advantage to be derived by masons, joiners, cabinet-makers, and such like from learning drawing; first drawing with instruments, then freehand from flat examples, and afterwards from large and simple casts of ornament. The method of execution and amount of finish I saw at the competition of working-men in Paris would, I think, suffice. The schools or class-rooms should be as light and spacious and be kept as clean and bright as possible, and be made interesting by casts and photographs of good works of art. In some of our very smoky manufacturing towns this is difficult I know, but we have to compete with public-houses and music-halls, which, besides other attractions, have that of a bright and cheerful appearance. Much can be done to improve the lighting in our evening schools, and without great expenditure, if the students are made to draw in classes of six or eight, or more if possible, from perfectly-lighted examples. There would be economy of labour for the teacher, the spirit of emulation could not fail to improve the work; and if the examples were changed periodically it would not be possible for a student to dawdle for months over a single drawing.

I would have elementary modelling taught after very little drawing. Very simple appliances and the ordinary fittings will suffice for this in the early stages, and modifications in the system of payments in this kind of work are now being made which will, I hope, stimulate members and students to undertake it. Heretofore very little has been done, because the practice of modelling has been less profitable than that of drawing or painting. Our encouragement must therefore be higher.

My experience in France and Germany has not induced me to wish for any important changes in our system beyond that of accepting a rougher kind of work from artisans. In the advanced stages we may copy with advantage certain methods practised in Germany for stimulating the production of designs and copies of good works of decorative art. For instance, our students might be encouraged to produce models for metal work, which should be gilded or coloured and mounted at the expense of the schools, as in Bavaria. Opportunities for the execution of decorative painting might be sought for or created until a demand came from outside, as it would come when architects found such work could be done without the expense of bringing decorative painters from abroad. By travelling scholarships or otherwise we might have some of our best students sent abroad to make studies of decorative art and measured drawings of buildings, which should belong to the department. Something of this kind is now under consideration, and we hope to secure as examples some pieces of decorative distemper painting executed by a Munich artist for the principal room of the Nuremberg Exhibition, and which received a grand gold medal. Our museum at South Kensington would be more useful to the artificer or student if there was in the building a special room set aside

in which he could make a more thorough study of fine works than he can while they are in the show-cases. In the last issue of the Art Directory provision has been made for the execution of some decorative painting for the national competition, and I hope that both painters and modellers in the training schools may show before long that they are competent to undertake the best kind of decorative work.

The best work executed in our schools in drawing, modelling, and painting, is better than any of the same class we saw in Paris, Saxony, or Bavaria, but there is little of it. There is reason to believe that it will be produced in greater quantity, if the initiative can once be taken by young people who have from their surroundings been led to aim at picture-painting and bust-making rather than at decorative art. Help must be given to this end in finding opportunities for the carrying out of successful designs, and prizes should be awarded for works of this kind.

For the rest, I have only to say that our recent experiences in these foreign countries has not led us to the belief that the main scheme or system of art education in this country can be changed with advantage.

## THE HISTORY OF THE SOUTH KENSINGTON AND BETHNAL GREEN MUSEUMS.

A PERIOD of thirty years having elapsed since the scheme for the advancement of science and the fine arts was submitted to Parliament, an official history of the Science and Art Department has been prepared from which the following is taken:—

From the year 1837 up to 1849 models or casts, prints and examples, had been purchased as necessary means of instruction in design and ornamental art in connection with the Schools of Design. 1,299*l.* was spent, for instance, in 1844–45 in the purchase of miscellaneous examples from Paris. For some time these objects had been stowed away in Somerset House for want of space. They included casts of ornamental art of all periods, copies of Raphael's *Loggie*, specimens of manufactures, &c. In 1851 the Board of Trade appointed a committee to select objects notable "entirely for the excellence of their art or workmanship" for purchase to the amount of 5,000*l.* from the Exhibition of the Works of Industry of all Nations in 1851. These, together with the casts, models, and examples from the vaults of Somerset House, were transferred to Marlborough House, and Her Majesty the Queen and others lent valuable specimens which were placed with them. The collections thus formed were opened to the public as a museum of ornamental art on September 6, 1852. They were arranged in divisions such as textile fabrics, lacquer ware, ivory carving, jewellery, enamels, furniture, wood-carvings, paperhangings, pottery, stoneware, hard porcelain, soft porcelain, Sèvres, Dutch earthenware, majolica. A selection of casts of the Renaissance period was also shown.

No special provision had been sanctioned by Parliament for increasing the collection during the year. It was therefore proposed that an annual vote should be submitted to Parliament for the gradual formation of a systematic National Collection of Manufactures of all periods, the first of its kind apparently in Europe. Such a "collection of specimens which should illustrate both the progress and the highest excellence attained in manufacture, both as to material, workmanship, and decoration, had long been a most desirable object, and considered indispensable to instruction. Indeed a museum presents probably the only effectual means of educating the adult, who cannot be expected to go to school like the youth, and the necessity for teaching the grown man is quite as great as that of training the child. By proper arrangements a museum may be made in the highest degree instructional." (See First Report of the Department of Practical Art.) Concurrently a library of works upon art was commenced from the collection of books of reference on art, purchased in earlier years for the use of the School of Design. This became the National Art Library.

In November 1852, in view of a proposal to purchase additional objects for the Museum, a minute was passed approving of a proposal of Mr. Cole's, which concluded as follows: "As the collection of articles for the Museum proceeds, objects of the same kind but of various degrees of importance and value will be amassed, and in order to render the objects which could be dispensed with most available for the purposes of public instruction, I propose that local schools of art may have the privilege of purchasing them at half the prime cost. Hitherto specimens of manufacture have been presented to the schools; but, in future, I recommend that the gifts be few and exceptional." Thus the principles of both forming a normal central collection and encouraging the establishment of local museums were affirmed.

It was from the first considered desirable to make the collections of art useful to the provinces as well as to the metropolis. With this view small selections of objects from the Museum, and photographs and drawings of rare objects either temporarily deposited or by their nature not easily removable, were lent for study and exhibition to provincial schools of art. This was the



commencement of the system of circulation of art objects throughout the country.

Towards the end of 1852 the Bandinel collection illustrative of pottery and porcelain was acquired. A Special Loan Exhibition of Furniture was held by the department in 1853, at Gore House, Kensington, when a collection of Studies of the Life by W. Mulready, R.A., was also exhibited for the instruction of students in the anatomical and figure class. Purchases to the extent of 8,583*l.* were made in 1854 from the collection of Mr. Bernal, principally of specimens of pottery and porcelain, majolica ware, glass, and metal work. In the same year the Chancellor of the Exchequer (Mr. Gladstone) purchased the Gherardini collection of models for sculpture, which was placed in the art museum. This collection, inasmuch as it referred to a branch of art not necessarily connected with manufactures, helped in extending the limits of the collections generally, which henceforth became "art collections." In 1855 purchases of objects were made from the Paris Universal Exhibition, and negotiations were at this time commenced for acquiring a large collection of mediæval ornamental art from M. Soulages of Toulouse.

Catalogues of the collections were printed with the earlier annual reports of the department and issued separately for public use; but as the collections increased it was determined to affix a descriptive label to each object. Accordingly in 1856 an inventory of the objects of art in the Museum, excluding British pictures and sculpture, was prepared, and a classification adopted to give a practical and instructive character to the sections of the Museum. Every object was labelled, the inventory entries serving the purpose also of labels. The classes of objects were defined as follows: Sculpture, glyptic and numismatic art, mosaics, painting, japanned or lacquered ware, glass painting, enamels, pottery, glass manufactures, works in metal, watches and clocks, jewellery and decorative objects in precious materials, arms, armour, and accoutrements, furniture and general upholstery, leather work, basket work, textile fabrics, bookbinding and book decoration generally, ornamental designs, drawings and engravings. Descriptive catalogues, with accounts of various classes of works of ornamental art, have been prepared from time to time by recognised authorities, and are intended to serve as standard works upon such subjects.

In 1856, Parliament voted 10,000*l.* for the transfer of the Department of Science and Art from Marlborough House to South Kensington. As respects the selection of the site at South Kensington the following particulars may be given: Upon the close of the Exhibition of 1851, a profit of over 150,000*l.* accrued to Her Majesty's Commissioners for that Exhibition. His Royal Highness the late Prince Consort, President of the Commission, proposed that this sum should be expended in the purchase of land to be devoted to institutions for promoting science and art. An estate was available for purchase in the neighbourhood of Hyde Park. It extended from Kensington Gore to Brompton. Parliament co-operated with Her Majesty's Commissioners in its purchase, and voted altogether about 181,000*l.* By gifts and purchases from the Exhibition of 1851, by gifts from the Society of Arts, &c., Her Majesty's Commissioners had become possessed of divers collections for public instruction in science and art. They applied in 1855 to the Government for assistance in constructing a building to contain these collections, and Parliament voted 15,000*l.* An iron building was accordingly erected under the supervision of the late Sir William Cubitt upon the south-eastern portion of the estate, which Her Majesty's Commissioners gave up to the use of the department. Her Majesty's Commissioners contributed 2,000*l.* for the building of refreshment rooms adjoining the iron building. They also expended 3,000*l.* upon internal fittings. In 1858 Her Majesty's Commissioners repaid 121,000*l.* of the money previously voted by Parliament, and the Government became possessed (under the Act Vict. 21, 22, c. 36) of twelve acres, valued at 60,000*l.*, of the south-eastern portion of the estate. The buildings thus erected, together with others already upon this portion of the estate, were used by the Science and Art Department for the museums of education, patented inventions, animal products, and ornamental art, the National Art Training School, and offices. On the site thus acquired the buildings have been erected for the remainder of the art collections.

The Lords of the Committee of Council for Trade, by minute dated February 6, 1857, accepted the trusteeship created by the deed of gift by which Mr. Sheepshanks transferred his valuable collection of pictures and drawings in order to found a gallery of British art in connection with the schools of art, and the Treasury sanctioned the necessary expenditure for the erection of a gallery to contain this collection. About the same time, in compliance with a suggestion of the Sculptors' Institute, space was allotted in the Museum for the exhibition of a collection of British sculpture. Thus a new division of the art collections was commenced, viz., British paintings in oil and water-colours, drawings, &c., and British sculpture.

An architectural museum had been founded in Cannon Row, Westminster, in 1851, by a private society as the nucleus of a "National Museum of Architecture." About 7,000 specimens, principally illustrative of Gothic art, had been collected. These were now handed over to South Kensington, and were arranged

with the Classic and Renaissance casts which belonged to the department. The Chief Commissioner of Works lent several architectural models to the Museum, and other persons made contributions. The fifth report of the department states that "there can be little doubt that if sufficient space be provided by the State for an architectural collection which shall properly display the architecture of all periods, the public will considerably aid in filling it."

In 1860 a Select Committee of the House of Commons was appointed to inquire and report concerning the South Kensington Museum. In the report of that Committee reference was made to the Fine Arts Committee of the House of Commons in 1841, who had reported that, "independently of the beneficial and elevating influence of the fine arts upon the people, every pecuniary outlay either for the purpose of forming or extending collections of art in this country has been directly instrumental in creating new objects of industry and of enjoyment, and therefore in adding, at the same time, to the wealth of the country." Evidence illustrated by actual specimens brought before the Select Committee of 1860, proved the soundness of the views enunciated in 1841, "and showed how by a judicious cultivation of the taste of purchasers and manufacturers, and by their action on each other, new branches of ornamental manufacture had been created within the last few years." The Committee arrived at the opinion that the South Kensington Museum in respect of its action throughout the United Kingdom, as well as the metropolis, is exercising a beneficial influence, and that it is fully deserving of continued Parliamentary support."

Donations to the art museum increased the number of sections of the art collections. The Grand Duke of Tuscany had presented a cast—Michael Angelo's *David* at Florence—and this, with original specimens of decorative and other sculpture in marble and stone, models in terra-cotta, the Gherardini collection already mentioned, laid the foundations for a collection of examples of decorative carving, modelling, and sculpture. By 1863 the art collections generally had so increased that the Lords of the Committee of Council on Education specially reviewed them, and directed that as some sections, mediæval art of Italy for instance, were well represented, "future purchases be confined to objects wherein fine art is applied to some purpose of utility, and that works of fine art not so applied should only be admitted as exceptions, and so far as they may tend directly to improve art applied to objects of utility. The decorative art of all countries should be completely represented. Second-rate works should only be acquired as substitutes until better works can be obtained. Where the taste of the age or country has been low, few specimens only will be necessary. Original works are to be obtained as far as possible, but where this would seem to be impracticable, the system hitherto pursued of representing the finest known examples by electrotypes, casts, and drawings will be followed, it being always kept in mind that the aim of the Museum is to make the historical and geographical series of all decorative art complete, and fully to illustrate human taste and ingenuity."

From 1853 the expediency of obtaining reproductions such as casts, photographs, and electrotypes of valuable works of art had been recognised, and in 1864 a minute was passed with the view of establishing relations between the department and continental museums. A list of foreign museums was prepared, and an international art inventory was compiled and published, but this was discontinued in 1879. It was known that in continental museums and other institutions, churches, and palaces, original objects were preserved which it could not be expected would ever become purchasable by this country. "Admirable substitutes of them might be easily obtained by various modes of reproduction with perfect safety to the originals." In 1867 His Royal Highness the Prince of Wales entered into a convention with several of the princes of the reigning families of Europe, for promoting universal reproductions of works of art for the benefit of museums of all countries. In course of time a number of important reproductions of monuments of various styles of art was procured, and a special court erected for the display of those larger specimens, such as the Trajan Column, the Santiago Gateway, the Fireplace from Bruges, Adam Krafft's sculpture from Nuremberg, the Sanchi Gateway, the Emperor Akbar's Council Seat, &c., which could not conveniently take their proper places in the historic series to which they belong. In 1881 it was decided to form a collection of casts of Classic sculpture illustrating the early history of Greek art. This new division of the Museum is in course of arrangement and organisation.

In addition to the acceptance, on loan, of works of art for temporary exhibition, special loan exhibitions of objects to illustrate a particular category of art in respect of objects of utility, or of methods of dealing with materials, have been held during many succeeding years since 1853. In 1862 a special loan exhibition of all classes of ancient works of ornamental art was held. In 1865 there was a special loan exhibition of miniatures; in 1870, one of fans; in 1872, one of ancient musical instruments; in 1873, one of decorative art needlework; in 1874, one of enamels on metals. But beyond the scope of such exhibitions, a series of three national portrait exhibitions, suggested by the late Earl of Derby, was carried out by the department during the years 1866, 1867, and



1868 in the southern galleries overlooking the Royal Horticultural Gardens. Two other special exhibitions have taken place—one to illustrate Spanish art, the other, in 1882, Scandinavian art.

Many valuable bequests have been made to the department for the art collections, and the India Museum was transferred to the charge of the Science and Art Department in 1879. Besides the gift of pictures by Mr. J. Sheepshanks in 1857, already referred to, the following more notable gifts and bequests may be mentioned: In 1860 and in 1873, by Mrs. Elizabeth Ellison, 100 water-colour drawings, for the purpose of forming a national collection of water-colour drawings. In 1864, by the Rev. R. Brooke, 396 objects, consisting of textiles, watches, rings, &c., and 718 volumes of books. In 1867, by Mrs. Wollaston, 270 drawings of mosaics. In 1867 and 1868, by Sir Chas. Wentworth Dilke, Bart., M.P., 297 volumes, 862 pamphlets, and 155 prints illustrating the Great Exhibition, 1851. In 1868, by Mrs. Louisa Plumley, 43 enamel paintings by Essex, Bone, &c. In 1868, by Professor Ella, 329 volumes of music, printed and in MS.; 6 busts, 1 oil painting (a portrait of Rossini) from the library of the Musical Union Institute. In 1868, by the Rev. Chauncy Hare Townshend, 211 objects, chiefly jewels, 189 oil paintings, 174 water-colour paintings, 4,218 Swiss coins, 831 volumes, 390 drawings, 1,815 prints. In 1869, by Rev. Alexander Dyce, 80 pictures, 63 miniatures, 802 drawings, 1,511 prints, 74 rings, 27 art subjects, 13,596 books. In 1870, by William Gibbs, Esq., Roman and Anglo-Saxon ornaments and other antiquities, chiefly found in Kent. In 1870, by John Meeson Parsons, Esq., a collection of 92 oil, and 47 water-colour paintings. In 1871, by W. Smith, Esq., 86 early English water-colour drawings. In 1874, by Alexander Barker, Esq., Venetian furniture of a boudoir. In 1876, by John Forster, Esq., 48 oil paintings, 74 frames of water-colour paintings and drawings, collections of drawings, sketches, and engravings, collection of manuscripts and autographs, library of printed and illustrated books. In 1876, by Sir Matthew Digby and Lady Wyatt, 148 fans. In 1876, by William Smith, Esq., 136 water-colour drawings, and about 700 volumes of books and MSS. See also his gift in 1871. In 1877, by the Shah of Persia, a collection of Persian carpets and textiles. In 1878, by the French Minister of Commerce, specimens of Gobelins and Beauvais tapestries. In 1882, by Mr. John Jones, a magnificent collection of works of art, chiefly French furniture, porcelain, and enamels of the eighteenth century.

The art collections at the South Kensington Museum thus formed are comprised under the following heads: (a) Objects of ornamental art generally (originals and reproductions); (b) British paintings in oil and water-colours, &c.; (c) British sculpture; (d) gallery of casts of Classic sculpture; (e) national art library of works on fine art, drawings, engravings, photographs, &c., and are available not only for the central museum and library of reference, but also for circulation throughout the country. The system of circulating objects of art (originals and reproductions) was revised by minute of March 29, 1860, and a report upon this function of the Science and Art Department was published in a Parliamentary paper in 1881.

In 1865, Her Majesty the Queen graciously lent the Raphael cartoons for exhibition at the South Kensington Museum.

In 1857 arrangements were made for lighting the Museum and throwing it open to the public on three evenings a week, and since that time, up to the end of 1882, 21,582,102 persons have visited the Museum. From 1856 to 1883 the amount voted for the purchase of objects of art (originals and reproductions), available both for the central Museum and for circulation in the provinces, has been 328,099/. That for purchases for the National Art Library has been 49,150/. The value of the bequests far exceeds the sum total expended.

The Department of Science and Art was constituted by royal charter dated April 30, 1864, a body corporate, since which time it has accepted numerous and valuable bequests of works of art.

The establishment of the branch museum of science and art at Bethnal Green arose out of two circumstances. The first was an intimation on the part of the inhabitants of the East End of London of their willingness to provide a site for such a museum if the Government would organise it. The second was the necessity for removing the larger part of the iron buildings at South Kensington to make room for permanent structures. The materials of the iron museum were thus available for re-erection elsewhere. The Treasury approved of the general proposal to use these materials in the formation of district museums. The branch museum at Bethnal Green was to be a national institution for the reception of objects of science and art being national property which are insufficiently provided for elsewhere. There were "one or more classes of objects in the South Kensington Museum which would appropriately constitute the foundation of such a museum, such as the collection of animal products useful in manufactures." The site was transferred by the inhabitants of the East End of London to the Government in February 1869, and the buildings which had been erected by a Parliamentary grant were completed early in 1872. The animal products and food collection were removed from South Kensington, and the artistic division of the new branch museum was for the time composed of pictures and works of art lent by Sir Richard Wallace. The branch museum

of science and art thus formed was opened by their Royal Highnesses the Prince and Princess of Wales on June 25, 1872. The science section of the museum has maintained its permanent character, but the artistic collections have been changed several times, various and important contributions on loan having been made by private persons. For some time the ironwork from the Kensington art collections was exhibited at the branch museum. Within the last three years all the specimens which illustrate modern phases of ornamental art have been eliminated from the art collections at South Kensington and placed in the branch museum. Up to the end of 1882, 6,428,479 persons had visited the branch museum.

The staff of the South Kensington Museum, including the Bethnal Green Branch Museum, the India Museum, and the Art and Educational Libraries, consists of a director, two museum superintendents, three museum keepers, ten assistant museum keepers, eight junior assistants, and nine technical and special assistants.

## THE WELLINGTON MONUMENT IN ST. PAUL'S.

A LETTER has appeared from Mr. Edmund Oldfield, a member of the St. Paul's Committee, in defence of the original design by Stevens, which had an equestrian statue surmounting the monument.

In sepulchral memorials, says Mr. Oldfield, two periods were often meant by the artist to be embraced in one composition, to make the history of the deceased, however great, more complete by the juxtaposition of life and death. This was not really illogical. Even upon the narrowest interpretation of the Aristotelian canon, unity in a drama is not impaired by variety of time, provided the singleness of subject is preserved. So with the arts of design. The painters of the Middle Ages, in their histories of saints, brought together several dates in the same fresco or panel, yet without raising any sense of discord. The more restricted conditions of monumental sculpture have usually confined the dates, in the case of effigies, though not in the case of reliefs, to two. As a general rule, the figure surmounting a sepulchral monument was in old times represented alive, whether or not the corpse was also represented below. The mausoleum of Halicarnassus had on its summit the statue of the king driving a *quadriga*. The cinerary urns of the Etruscans were crowned with figures of the deceased reclining on their left elbows, with drinking horns, cups, or other symbols of life in their right hands, though often the sides of the urns bore representations of the same persons in death, as may be seen in abundance in the Museum of Volterra. The sarcophagi of the Romans were equally surmounted by effigies of persons apparently alive. In the Middle Ages we have an exact Gothic counterpart to the supposed anomaly of Stevens's design. The monument of Can Grande at Verona shows the "Gran Lombardo," the protector and friend of Dante, lying dead upon his sarcophagus, while the architectural canopy above bears his statue on horseback, though necessarily of smaller dimensions. The other monuments of the Scaliger family in the same burial-ground repeat the double representation. By an exceptional treatment the statue of Robert the Wise is four times introduced on his tomb in Santa Chira, at Naples—once in a recumbent form, attired as a monk, on the sarcophagus; once seated above on his throne as king; and twice elsewhere in combination with other figures. In the cinquecento period, to which Stevens's design by its style belongs, the same practice continued. Take the royal monuments of St. Denis, which, though grievously restored and modernised, still show the conceptions of the greatest artists of France. The tomb of Louis XII. and Anne of Brittany, sculptured by Jean Juste, displays the royal pair lying dead on a sarcophagus, while on the canopy overhead their statues reappear, kneeling in prayer. Similar is the treatment in the sumptuous monuments of Francis I. and Claude of France, designed by De l'Orme, and executed by several sculptors; and again in that of Henri II. and Catherine de Medici, designed by Primaticcio, and sculptured either by Germain Pilon or Pierre Bontemps. Possibly these Valois kings might have looked more at home on horseback than on their knees, especially the last named, who died in the saddle, and not at the *prie-dieu*; but such was not the feeling of the pious artists, some of them Huguenots, who sought (in vain, alas!) to commend them to the respect of posterity. The horseman "riding into the cathedral on the top of his own monument" is not, however, wanting from this school. By an easy transition, we pass from Henri II. to the husband of Diana of Poitiers, Louis de Brézé, whose gorgeous tomb, attributed to Jean Goujon, may be seen in Rouen Cathedral. The equestrian figure of the deceased here appears under an arcade above, while his corpse, lamented by his *fidissima conjux*, as she describes herself in the epitaph, lies stretched on a sarcophagus below. Regard for space restrains me from offering further illustrations; but what I have written may sufficiently show that the double representation, however startling, perhaps, at first sight, is neither without meaning nor without authority.



## NOTES AND COMMENTS.

THE people of Brisbane who invited English architects to compete for a new town hall, did not anticipate that a great number would take an interest in the competition. Accordingly, only three or four copies of the particulars and instructions were remitted to the London agents. In a short time the supply was exhausted. The agents expected that the copies which they had sent out would be returned to them, and become available for the use of the new applicants. But it was absurd to suppose that so small a number would be sufficient. Architects who now inquire for the conditions of the competition are told that there is no chance of obtaining the information. Instructions should have been given to the agents to print copies in England. At present no more than a very few architects are in a position to take part in the competition. When the circumstances are known in Brisbane, we suppose arrangements will be made to send a fresh supply of conditions to England, and of course the time for sending designs will have to be extended.

At a time when some of the authorities of the suburbs of the metropolis have been invoking the aid of the Home Secretary to enable them to obtain supplies of water independently of the water companies, it is not encouraging to find that there is a dangerous scarcity of water in Richmond, although the source supply belongs to the vestry. A sum of about 60,000*l.* has been expended on an artesian well, but it does not appear to be equal to the demand upon it. Artesian wells are proverbially uncertain, and so long as a town depends entirely upon one there must be empty cisterns occasionally. The passage of the water to the well is beyond human control, and the supply may be affected by causes which are unknown. Yet there are enthusiasts who, if they had the power, would make the metropolis, with its four millions of inhabitants, dependent upon the intermittent supplies of artesian wells. In Northampton there is also a difficulty in obtaining a sufficient supply of water. As the population of towns increases, deficiency of water is likely to be heard of more often than it has been. There is no want of gathering grounds for supplies, but until they are appropriated according to the general interests of the community, instead of being monopolised as they now are, some towns must periodically endure water famine.

THE meeting of the British Archæological Association at Dover during the week has been successful, although Earl GRANVILLE, who was the president for the occasion, was unable to be present. The town, as everyone knows, contains much that is interesting to the archæologist—more, in fact, than was visited by the members. One modern piece of work attracted attention—the new town hall—which was designed by Mr. BURGESS, but unhappily he did not live to complete it. Among the places in the neighbourhood which have been visited are the Priory of St. Martin's (part of which was restored by Mr. STREET), Richborough, Sandwich, Lyminge, Hythe, and Caesar's Camp, near Folkestone. Some interesting papers were read at the evening meetings. The Association held its first meeting at Canterbury in 1844, and its history since that time was narrated by Mr. THOMAS MORGAN. The samphire plant, which is mentioned in "King Lear" as being found at Dover, was not forgotten. The charters, regalia, seals, silver oar, and other valuables belonging to the Dover Corporation, were exhibited in the Town Hall.

ABOUT six months ago some important alterations were commenced at the Louvre, with a view to increasing the available space of the French national museum. The heavier portions of this work are now sufficiently completed to allow of the decoration and fitting up of the two new galleries being taken in hand. One of these is intended to receive the collection bequeathed to the nation by M. THIERS, while the other will form a much-needed extension of the painting section. This latter gallery will, moreover, present a double novelty, both from the highly original and artistic character of its decoration and from the remarkable nature of its contents, which will include many of the finest works of sculpture as well as painting in the possession of the Louvre. It will, in fact, be a representative gallery. Much is expected from this

method of arrangement, which is an entire innovation, the two sections of painting and sculpture having always hitherto been kept separate in French museums. The new gallery, situated on the river side of the palace, and forming a long parallelogram, has hitherto been used as a storehouse or lumber-room, its only available light being obtained from bull's-eye windows in the spring of the vaulted roof. There is now an iron and glass roof, the top of which can be seen from the Pont Royal, rising several yards above the surrounding roofs of the building.

THE Italian Government have at last been persuaded that it would be an advantage to have a National Gallery in Rome. A decree for its foundation has been issued. But the gallery is to be representative only of the works of living artists or of artists who have died within a recent period. It is to contain the "best works in painting, sculpture, design, and engraving, without distinction of kind or manner." The Minister of Public Instruction is to give the commissions for the works which are to be hung in the gallery. The works will be selected from public exhibitions, and in some cases purchased from the studios. Nine-tenths of the money will be appropriated to works by living artists, and the remainder to the purchase of works of artists who have died within a period of thirty years.

THE wood of the cherry tree is said to be becoming fashionable in the United States of America for furniture and the fittings of rooms. A banking-house is said to be finished entirely of the wood, which is left unvarnished. The timber is chosen from the wild cherry, which in New England and the Northern States does not usually grow to a girth of more than 20 inches, but in some of the Western States and in the South it frequently attains a diameter of 24 inches. The domestic fruit cherry gives some good specimens of small timber, but as the tree is rarely sacrificed until it is past bearing and is decayed, this source of supply is precarious. Like all close-grained timber, the best specimens are those which grow singly in exposed situations and not in a dense forest.

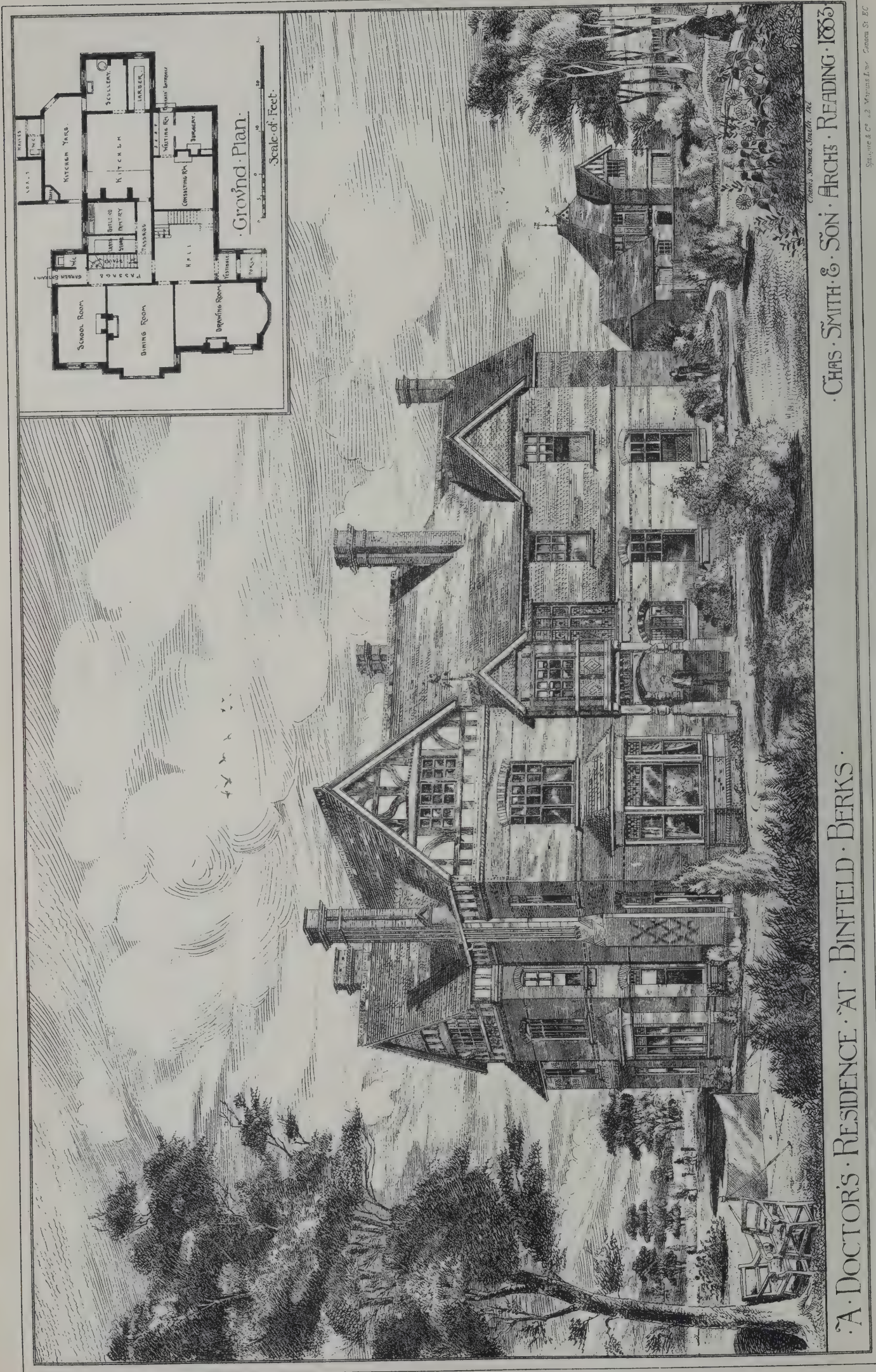
THE Louvre has just received an interesting collection of antique terra-cottas from Myrina, in Ancient Mysia (Asia Minor), where they have been unearthed by the peasantry of the country. The most remarkable is a large figure of a dancer in a perfect state of preservation. The others appear for the most part to be imitations of Tanagra figures, the Greek type being followed even to the addition of the slender plinth, whereas purely Asiatic productions of this kind are almost invariably raised on pedestals. One of the largest of these terra-cotta figures represents a nude VENUS standing near a vase, signed on the reverse. At Epidaurus, where the pupils of the French School at Athens are excavating, they have brought to light the remains of a Doric temple. Among the ruins were discovered ten lions' heads, that had evidently been used like gargoyles; two headless statues of ESCULAPIUS, one of HYGIEIA, an ex-voto and fragments of a Centauromachia. The Société Française du Laurium has, moreover, discovered twenty-nine vases of primitive style, which have been placed in the hall of the society.

IF what is said by the *New York World* be true, there is no doubt that the city of New York stands as much in need of a sanitary revolution as any town in benighted Europe. The tenements that extend for miles on the east side of the city are in a deplorable condition. Most of these structures were built to house as many people as possible, and with no more light and air than was absolutely necessary. The result is that thousands of people are crowded into dark and ill-ventilated holes. They are choked, worried, consumed, and the astonishing spectacle is presented on a sultry night in these streets of the entire population seeking the sidewalks for air and comfort. Sanitary inspection, the *World* believes, has done very little to abate this evil, and it is doubtful if ever will do much until the boundaries of New York are carried into the broad spaces of what are now the suburbs, and an enlightened public opinion insists upon improved tenements for the poor.









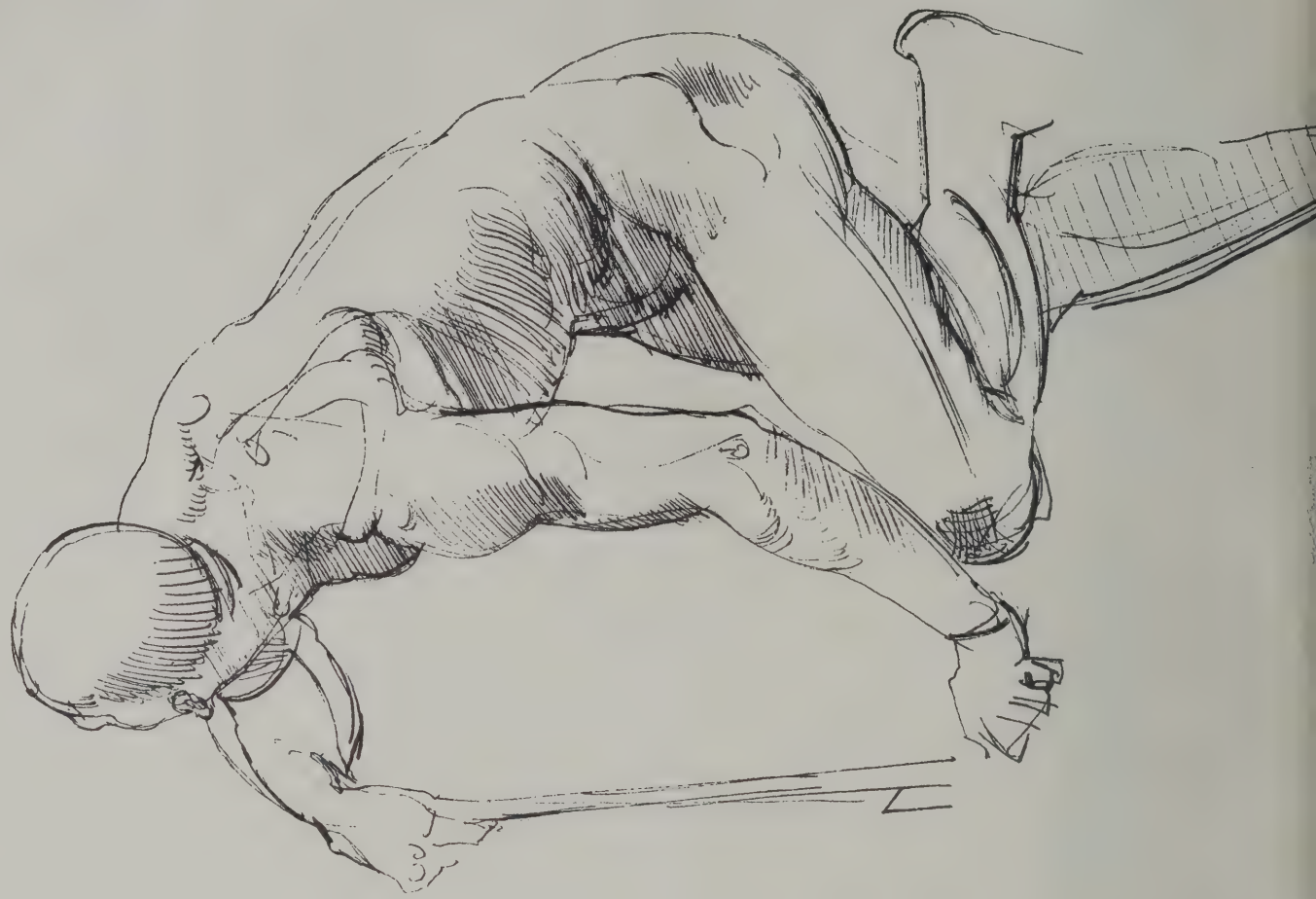
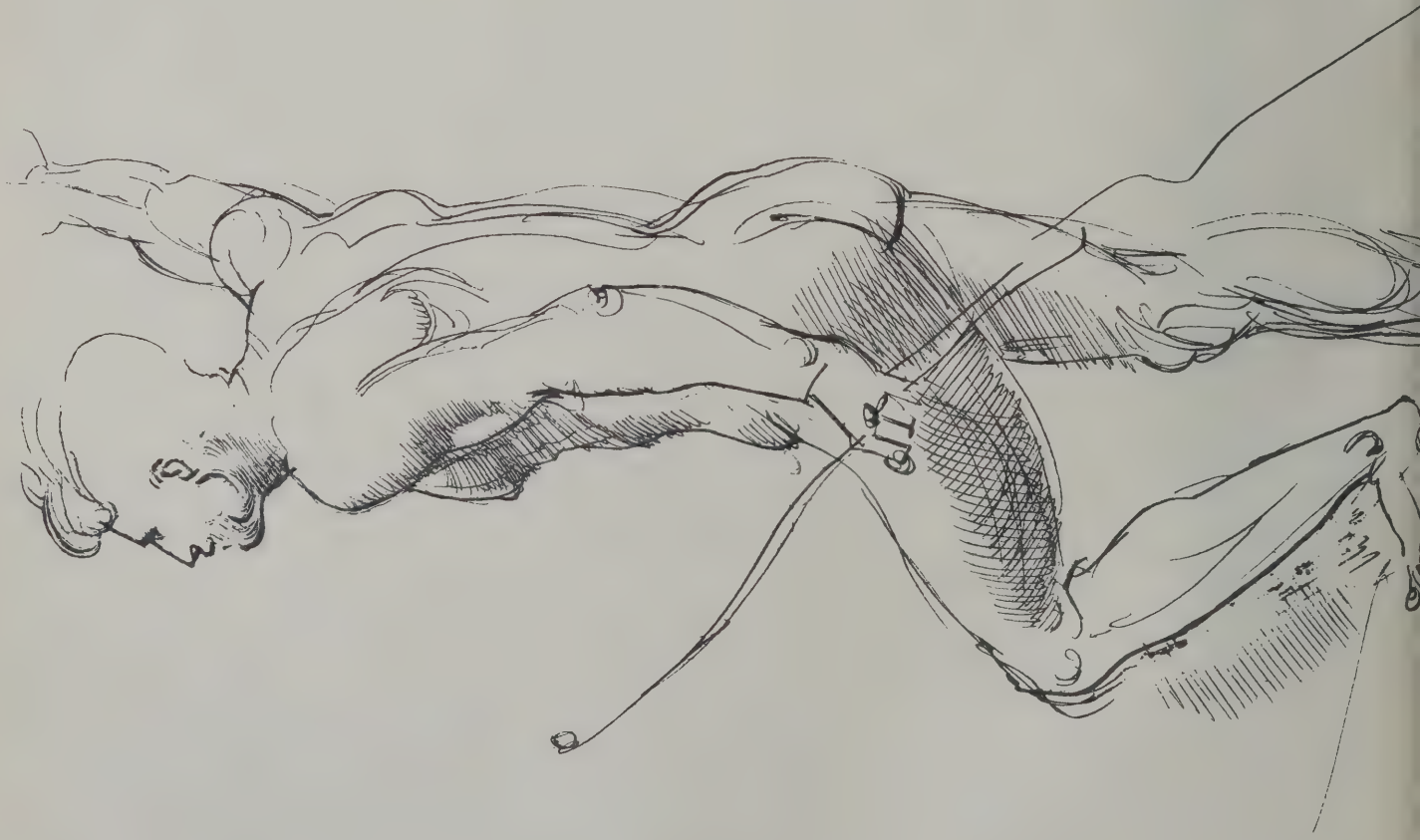
A DOCTOR'S RESIDENCE AT BINFIELD BERKS.

CHAS. SMITH & SON ARCHTS. READING 1883

























"INK-PHOTO", SPRAGUE & CO. LONDON.

VIEW IN  
FROM A W.  
By



25<sup>th</sup> 1883.



WINCHESTER.

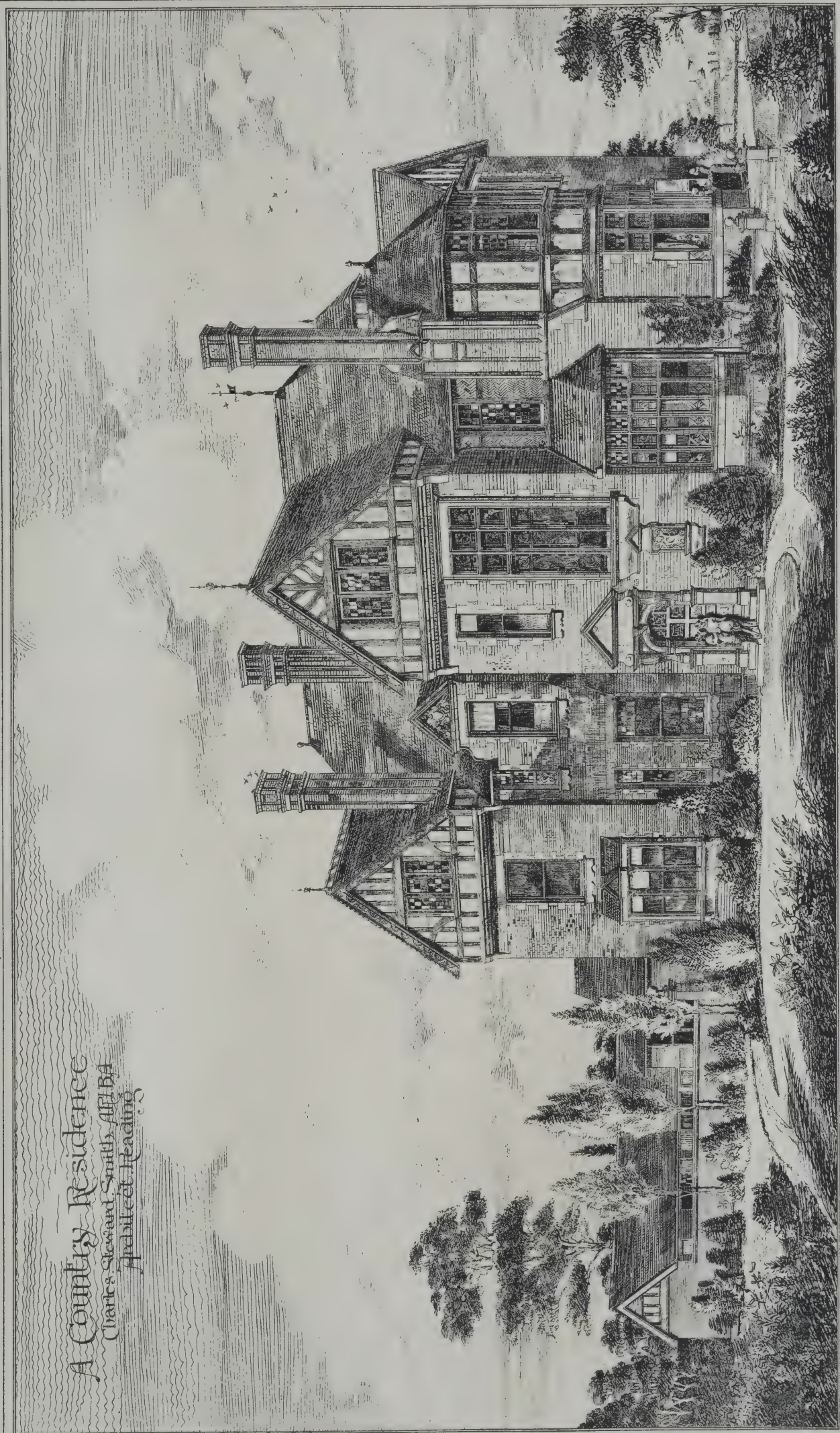
COLOR DRAWING.  
AUD.







A Country Residence  
Charles Steward Smith, A.R.C.A.  
Architect Reading



Engraved by Wm. J. L. Smith, N.Y.







## ILLUSTRATIONS.

VIEW IN WINCHESTER.

THIS reproduction of a water-colour drawing by Mr. BARRAUD shows one of the oldest streets in Winchester. It is, we believe, in contemplation to remove some of the buildings under a towns improvement scheme.

A DOCTOR'S RESIDENCE AT BINFIELD, BERKS.

WE illustrate this week a house recently erected in the favourite residential locality of Binfield, Berks, for Mr. JOHN SWINDALE. The planning of this building has been specially arranged for a country surgeon, the patients' entrance and waiting-room being kept well apart, both from the principal and servants' entrances, the consulting-room, however, having access from the hall. The house and stables, externally, have the lower portions faced with red brick from the locality, relieved by grey panels, &c., with tile hanging and half-timber work above, the roof being covered with brown tiles. The works have been well carried out by Mr. EDWARD MAY, builder, of Bracknell, Berks, from the designs and under the superintendence of Messrs. CHAS. SMITH & SON, architects, Reading.

A COUNTRY RESIDENCE.

THIS house is to be executed in red local hand-made bricks, with Bath stone dressings. The half-timber work is of oak, left rough from the saw, the roofs being covered with Broseley tiles. The internal woodwork is of pitch pine. The architect is Mr. C. S. SMITH, of the firm of Messrs. CHAS. SMITH & SON, architects, Reading.

STUDIES FROM THE LIVING MODEL.

THESE studies are from originals drawn with a pen by M. PAUL BAUDRY, the French painter.

## LANCASHIRE AND CHESHIRE ANTIQUARIAN SOCIETY.

A MEETING of the Lancashire and Cheshire Antiquarian Society was held at Preston on last Saturday, when several places of interest were visited, under the guidance of Mr. Charles Hardwick, author of the "History of Preston." The first was the picturesque mansion of Penwortham Priory, the seat of Mr. Lawrence Rawsthorne, who showed his guests the interesting remains of old work that are embedded in the more modern structure. One of these antique features is a very large ingle-nook, with a beam of extraordinary proportions. From the high road a finely-wooded avenue leads to the church where Mr. John Horrocks, the founder of the cotton industry of Preston, and many other local notables are buried. Close by is a large artificial mound known as "Castle Hill." Mr. Hardwick here gave a short address on the result of the excavations in 1856, and which had revealed the existence of an antique dwelling-place, apparently one of the rattle and daub houses formerly common. A Roman key of somewhat late make, numerous animal remains, and a fine spur were amongst the articles discovered in the debris. Mr. Thorner conjectured that the building had been the court-house or tribunal of the baron of Penwortham. The site of the Roman station of Walton-le-Dale was next visited. It is now covered with gardens, and little or no trace is visible of its former condition. The next point of interest was the museum, where the Rev. Jonathan Shortt explained the archaeological objects of local interest. These include a small selection from the great find of coins made at Cuerdale, and about 400 Roman coins discovered many years ago near Fleetwood, and recently presented to the museum by Dr. Browne. A number of relics of Samian ware and other pottery from the Walton station were also shown. In the same building is the library bequeathed to the town by Dr. Richard Shepherd, an interesting collection strongest in the medical and general literature of the latter part of the seventeenth and first part of the eighteenth century, but including some fine specimens of the printing of Bodoni and other *notabilia*. Another object of attraction was the oak-panelled room in which Sir Richard Arkwright is said to have first set up the machines that were destined to have so great an influence upon the fortunes of his country and the world at large. The old cockpit and the site of the bull-stake were also seen. The various localities connected with the Stanleys and with the Stuart rebellion also attracted the attention of the visitors. In the evening a meeting was held at the Victoria Hotel. Sir Thomas Baker, in taking the chair, expressed his satisfaction with the work of the Society, and said that after seeing how few were the remains of the station at Walton, he should feel more satisfaction in think-

ing of the safe preservation of the fragment that still remained of Roman Manchester. It was greatly to be desired that archaeological objects when found should be carefully described, labelled, catalogued, and, where possible, placed in some public museum. Mr. Charles Hardwick then read a paper on the Roman remains found at a place known as the Plump, and traditionally said to be the burial-place of the warriors of the Duke of Hamilton slain by Cromwell in the fierce fight when "Darwen's stream with blood of Scots imbued" was celebrated by Milton. A "Scotch penny," found by some labourers, proved to be a first brass of Domitian, and excavation brought to light a variety of pottery, coins, and other evidences of Roman occupation. The discovery of this hitherto-unknown station had proved to be a matter of great importance for the right understanding of the history of Lancashire in that early period. Mr. Georges Esdaile read some notes on the Priory of Penwortham and its connection with the great Abbey of Evesham, of which it was a dependency. In the conversation that followed, Rev. G. W. Reynolds, Mr. J. E. Bailey, and others joined, and the proceedings closed with votes of thanks to Mr. Rawsthorne for permission to visit the priory, and to other gentlemen who had aided in the carrying out of the programme of the day.

## MANCHESTER ART GALLERY.

THE Art Gallery Committee are now engaged, says the *Manchester Guardian*, in the arduous task of hanging the works selected out of more than 3,000 sent by artists for the forthcoming exhibition. In this important labour they have the professional superintendence of Mr. Val. C. Prinsep, A.R.A., who has kindly given his assistance to the Corporation. Some idea of the extent and attractiveness of the exhibition may be gained from the fact that the contributions include works by Sir F. Leighton, P.R.A., Millais, Holl, Briton Riviere, T. Faed, Yeames, Herkomer, Alma Tadema, Pettie, G. F. Watts, Phil Morris, MacWhirter, Prinsep, Ansdell, Crofts, Storey, Calderon, Leslie, Poynter, and other academicians. Of the usual contributors to the Grosvenor Gallery, Burne Jones, Whistler, and Holman Hunt are represented by important works; and Madox Brown, John Collier, Waterlow, Mrs. Jopling, Charlton, Basil Bradley, Holloway, Leslie Thomson, Logsdail, and most of the prominent outsiders send pictures. Amongst the foreign artists exhibiting may be mentioned Fantin, De Neuville, Vibert, and Giardi. Amongst local painters Partington, Percy, Somerset, Hague, Sheffield, Jackson, Slater, Bright Morris, Joseph Knight, and J. Armstrong may be mentioned as important contributors. A beautiful series of pictures of childhood has been sent by the Fine Art Society, and a very interesting series of paintings illustrating animal life by the proprietors of the *Graphic*. Altogether it is not too much to say that a more thoroughly representative exhibition of the fine art of the day has never been collected together than that which will be opened on the 31st instant by Lord Carlingsford.

## LANERCOST PRIORY, CUMBERLAND.

AN address was delivered at Lanercost to a local society, by Mr. H. J. Bulkeley, upon the ruins of the Priory and Picts' Wall. In the course of it he said:—

Who of you, if he possesses any sense of natural beauty or any historical imagination, can look at that ridge of hills without thinking of the Roman Wall that topped it, so that anyone walking along the opposite side of the valley could have seen its long grey outline surmounted by ever-moving soldiers cutting themselves out against the northern sky? There in wind and calm, and sunshine and snowstorm, those armed soldiers—some perhaps of the century of Cassius Priscus (whose name is to be seen on the Lanercost cloister garth), some of them brought right away from the sunny south to this cold land—ever, ever paced, ready to call their comrades from mile castle or station, should the savage Picts be seen creeping up through the hills from Bewcastle to make one more fruitless attempt to break through that barrier of stone and steel. So strongly built, such a solid mass from front to back, as indeed from end to end, it must have seemed as though it would have stood for ever. You may see on Hare Hill how strongly cohesive even the inner work was, and is, for it stands there, nine or ten feet high, as it has stood for many a year, crowned with bushes and polypody fern, though the facings of harder-worked stone have been completely torn away. And most of it would have stood well into our time unless man had not been much more destructive than wind and rain, and burrowing rabbit, and insinuating roots of hazel and blackthorn, of ash and oak. Look northwards when you cut the wall on the road between here and Walton, and you will see the line of the ditch climbing up Craggle Hill more clearly at one glance than from any other point of view about here. But, as your eye rises with the ground, you will observe one farm, Haytongate, built right across the ditch, and another, Randylands, just on its counterscarp. Whence came the stones of which these farmhouses, or their predecessors, were built? From the departure of the Romans until almost to-day the



wall has been a great quarry for the country through which it has passed. And yet so massive was it, and for the most part in such a thinly-inhabited district, that the ruin must have been very gradual. For a long time Byron's lines about the Colosseum could almost word for word have been used of the Picts' Wall :—

A ruin—yet what ruin! From its mass  
Walls, palaces, half cities have been reared.  
Yet oft the enormous skeleton ye pass,  
And marvel where the spoil could have appeared.  
Hath it indeed been plundered, or but cleared?

If for "palaces" we must in all modesty substitute farmhouses, we might add, as indeed Byron could have added, churches. There must be few spots in Cumberland where from the bottom of a valley, in a sparsely-populated district, three churches can be seen at once. Yet this is the case at the north end of this bridge. Nether Denton Church, about capping Irthing valley, as seen hence, and Walton Church, in some degree an architectural daughter of the abbey, crowning the east bank of King, are very recent erections, and neither Mr. Ferguson nor Mr. Paley would be likely to allow the stones of which they were built to be stolen from the wall. But far different was the conduct of those Austin canons or De Vallibus lords who built the third, the Priory Church of St. Mary of Lanercost. The inscribed stone in the cloister garth, the altar—so insisted on by Dr. Bruce at the recent visit of the Archaeological Institute—that is built into the roof of the chancel clerestory are not the only evidences of the way in which Roman relics were used by these practical monks. The square-headed stones, which can be seen in the abbey itself and in the surrounding walls, by their shape and working prove their origin and show that the whiter stones of the abbey, one feature of its varied beauty, were taken from the Roman Wall, or perhaps from some intra-mural station at Lanercost, the road to which passed over the Roman bridge. Let us look at the abbey from another point of view. The bridge on which we stand was some centuries off being built; most likely the old Roman bridge had fallen into ruins, and it was through a ford that, on Michaelmas Day, 1306, in a litter carried by horses, Edward I. arrived here, sick in body but still strong in mind, perhaps our greatest English king. Fancy Edward Longshanks having passed with his retinue through this very stream, having been received by the prior with all state at the porter's lodge, having lived and slept, as well as he could, for six months (by tradition) in the pele tower that now forms part of the vicarage, leaving it at last to do little else but suppose that he was better, as a sign hang up his litter in Carlisle Cathedral, and then ride slowly and painfully to Burgh-on-Sands to die. Such is the most notable historical memory of Lanercost, one of which such a humble priory might well be, and no doubt was, proud. But Irthing saw another sight when, in 1311, lead by the Bruce himself, and in 1346, the Scots burst through its fords, or over its northern range of hills, and sparing only the church, reduced buildings and community almost "to nothing." Perhaps some of them were never rebuilt. Or, if they were, they, or those parts not used as the Dacre dwelling-house, fell into rapid or gradual ruin after the suppression of the priory by Henry VIII. But how is it that so much of the church remains? If we remember, as has been recently discovered from Chancellor Waugh's interleaved copy of Bishop Nicholson's visitation notes that, for no doubt a considerable, though uncertain, period between 1536 and 1730 the parish church was just the north aisle, and that the nave, too, was open to the sky, and, so far in ruins, it is with increased wonder that we see the whole church, in its beautiful proportions, almost whole to the top of the walls, so that, with the aid of a few planks at the north-east corner of the north transept, the clerestory all round the church is perfectly sound. Well, there would seem to be two historical reasons for our still having our grand priory church, its shell almost as complete, and at least as charming in its weather-tanned old age, as when it came fresh from the hands of the original builders. One is, that the Roman Wall was such a good quarry close at hand, the other that the conventual buildings were granted to Sir Thomas Dacre, who would feel an ancestral pride in taking some care of the church that was associated with the names of Vallibus, Multon, and Dacre. And when it passed from the Dacres of Lanercost to the Crown it was in safe keeping as compared with what some private proprietors might have been. And now that the Howards own it, we know that it could not be in more careful hands. Perhaps some of you may think that the picturesqueness of the ruins has been lessened this year by the small trees and brushwood having been cut down that here and there sprang from the tops and sides of the old walls. Byron said, also of the Colosseum—

the low night breeze waves along the air  
The garland forest which the grey walls wear.

And I remember when I was in Rome, eleven winters ago, how the sub-rector of the English College of Jesuits indignantly denounced the Italian Government as "Goths" because all the green was being stripped from the walls of the great Flavian Amphitheatre. But this, no doubt in some ways, beauty-destroying work had to be done, though with regret, both at Rome and

Lanercost, for roots, when they get well into a wall and grow and force the stones apart, and a strong wind sways their branches, exert a leverage which at last even the firmest masonry can hardly resist. If you want to see how a root can grip, look at a big stone on the rockery at the vicarage, how it is held inextricably by the red gums and fangs of an old yew lately uprooted from the west side of the crypt. Human beings are not the only animals that take an interest in the Lanercost ruins. For them it is made more beautiful not only by the green growth that still clings to its walls, but by the many birds that there find nesting and roosting and hunting places. One year some hawks built in the old tower. There the barn owl flits about noiselessly in the gloom, except for an occasional whistling scream, or sits for hours teaching its young for some good reason to make a noise like knives being ground; and occasionally one catches a sight of that very shy bird the misnamed goatsucker, or nightjar; and earlier in the evening it is a famous prey- and play-ground for the swifts who rush just over the old buildings, sometimes a dozen together, making the air tremulous with the beat of their wings, and their chorus of peculiar shrill cries. But the prominent bird is the jackdaw. As a rule he keeps his distance, but the cold weather makes him daring, and he robs the little birds of the crumbs thrown out by the children, and one day last March stole all my pyrocanthus berries. One pair build every year at the back of the head of the figure of Mary Magdalene, and scatter sticks about in front of the west door, for they are not economical builders. Now they are off with their young for a holiday on the fells, but it is said that they send messengers every day to see if the old home is still standing. No doubt you have noticed the two recent inscriptions on the bridge about it being unsafe for traction engines. In our thirst for archæology let us not despise modern history. Those inscriptions, though but a few years old, are a historical fact of much interest to the lover of the picturesque, for it lives in the memory of not the oldest inhabitant that over this graceful bridge, almost a packhorse bridge in its lightness, two by no means graceful steam engines, with biblical names, "Cain," in this instance, being assisted in his murderous attempt by "Abel," once passed, and so shook the bridge in their passage, the south arch being evidently depressed from its true curve, that very rightly they and all their kin are warned not to commit the like offence. Two years ago I brought an artist friend to this spot with a large canvas and got him to paint the bridge from this point, hoping to see the picture in the Royal Academy. But when he got back to London some very wise cockney critic persuaded him that the picture was spoilt by—what do you suppose?—the bridge, forsooth. And so my friend painted out the bridge and substituted, who cares what, and sold the picture at any rate.

### SOME EARLY BUILDINGS IN SUSSEX AND SURREY.

DR. E. A. FREEMAN has contributed the following interesting paper to the *Guardian*: The necessity of combining strictly historical with purely architectural study never comes out more strongly than in dealing with the English buildings of the eleventh century. Their history is very simple, and it has been set forth over and over again; but such is the working of a confused nomenclature, and a generally confused way of looking at things, that it needs to be set forth afresh every time any building of the class, or of any kindred class, is seen or spoken of. As long as people go on asking, in Yorkshire no less than in Surrey, "Is this Saxon?" there is no means of answering them in monosyllables. It might be in vain to ask back again how in Anglian Yorkshire a building of any date could be "Saxon," or how, in the South-Saxon land, a building of any date since 491 could be other than "Saxon." What is really meant commonly is, "Is this building older than 1066?" And to that the answer in many cases must be, "I do not know, and it does not much matter." Nothing is more certain than that many of the so-called "Saxon" buildings are later than 1066; but they are none the less (like King Boso) "id quod sunt;" they are none the less what people mean, so far as they mean anything, by calling them "Saxon." That is, they belong to a style which was in use when King William came into England, which did not at once come to an end when King William came into England, but which did from that time, or more truly, from a time a few years earlier, gradually die out and give way to another style. But to talk of this style as "Saxon," meaning by "Saxon" "English older than 1066," does nothing but lead to confusions of every kind. To tell the tale again for the thousand and first time, for several centuries before the eleventh, all Western Europe built in one variety of Romanesque architecture. In Gaul and Britain this style gave way in the course of the eleventh century to various local forms, as Norman and Provençal. The Norman variety was brought into England under Edward the Confessor; it became established in the course of the second half of the century; and all the greatest churches were rebuilt in it. But the elder style had some slight influence on the newer, and it continued for a good while to be used alongside



of it, especially its church-towers. In Germany, on the other hand, the elder style lived on through the twelfth century; it improved and developed, but it did not give way to any other styles till the coming of the Gothic forms in the thirteenth. We have thus a form of Romanesque quite distinct from Norman, older than Norman, but which lived on alongside of Norman. In this style great buildings were still built in Germany in the twelfth century. In England little, if anything, was built in it after the end of the eleventh; and, owing to the rebuilding of all the great churches after the Norman Conquest, all the English examples of the style belong to small and commonly rude buildings.

All this is perfectly clear to anyone who understands the architectural and the general history of Britain, Gaul, Germany, and Italy. But to talk of such a style as "Saxon" confuses the whole story. It is open to all the general objections against using that word *chronologically*, and to some special objections of its own. The style is in no way peculiar to the Saxon lands of Germany and Britain. It belongs no less to Northern England, to Southern Germany, to Lombardy, Burgundy, and Aquitaine. In short, unlike the latter local form of Romanesque, it is common to all Western Europe. The "Saxon towers" of England are simply small and rude examples of the same type as the great *campanili* of Italy.

One of the most remarkable of these buildings, the tower of Sompting church in Sussex, was visited at the late meeting of the Archaeological Institute at Lewes. Two others, one of them quite as remarkable, the churches of Bosham and Worth, were not, and could not well be visited. In the same county there is work of the same kind at Woolbeding, near Midhurst; and, to cross the borders into another kingdom and diocese, there is a most remarkable example in St. Mary's church at Guildford. A few words on some of these buildings, coming after the Lewes meeting, may not be out of place. One eye at the Lewes meeting, that of the local reporter, who spoke of the "Rhine-like spire," seems to have taken in what he was looking at. We hope that so observant an eye may some day have more distant practice at Romainmotier and at St. Aventin.

Sompting tower is the only one of the class in England which keeps its original capping, a kind of diagonal, four-sided spire, rising from four gables. It would be rash to say that all the towers of the class were finished in the same way; but some others certainly seem to show signs of it, and the finish is common in Germany. This is doubtless what the reporter chiefly meant by the "Rhine-like spire"; but we may give him credit for feeling, if not for knowing, that the whole class, rare in England, is common in Germany, even if he had not gone on to the further fact that towers of this kind went on a hundred years later in Germany than they did in England. No record of the building of Sompting tower seems to be preserved; it would be nothing startling if it could be proved to be not only later than 1066, but actually a work of the twelfth century. The Lincoln towers were built between 1068 and 1085; some of their neighbours in Lindsey seem from their details to be later still, and we must not forget that traces of the earlier style have affected even the Norman west front of Tewkesbury, which cannot be earlier than 1103, and may be as late as 1123. In all this there is nothing wonderful, if we remember that we are not simply fixing dates, but tracing the history of a style of art. Men went on building in English fashion as they went on speaking in English fashion, though other men were building and speaking in Norman fashion alongside of them. It would be dangerous to guess any date for the tower of Sompting; but should it turn out to be of the date even of Henry I., we should accept the discovery with the same kind of feeling with which we greet a good English name in that King's pipe-roll and in other documents far later still.

Sompting tower has some peculiarities of its own, besides the unique effect given to it by its covering. Its long-and-short work, as Rickman saw long ago, is unlike other long-and-short work. It has coupled windows with mid-wall shafts; but they do not go all round the tower, and they have a character altogether their own. Both the windows and some other details of the tower forsake the usual hardness and squareness of the style. They show a fondness for a round surface instead of a square, a tendency which the style often shows in its larger arches, but not often in these small features. Thus in the upper part of the tower the pilaster strips change into slender shafts with capitals, such as are common in German and Italian apses. Of the capitals some are quasi-Corinthian, some quasi-Ionic, but not at all like the familiar Norman variety of Ionic. So we get an ornamental string round the tower, but it has not any of the common Norman ornaments. Within, the tower arch is rich and stately; it is of far more finished work than is usual in our Primitive Romanesque, but it shows one of the marked features of the style. Instead of the many orders, with or without nook shafts, of the Norman style, there is the single half-column set against a flat surface, and that, as in some other cases, continued as a heavy roll along the arch. This, again, connects the Early Romanesque of England with that of Ireland, and, it would be safe to add, of Wales. It was very seldom that—perhaps only in the single case of St. Woollos—the English, British, or Irish builder of a doorway or a chancel or tower arch found Roman columns ready to his hand. But he liked

to come as near to Roman models as he could. A flat surface and something as much like a column or half-column as he could get was what he sought after; the Norman type was not to his taste, unless haply in the chancel arch at Bosham.

The rest of the church at Sompting, even without the tower, is remarkable in many things. For one thing, it is very South-Saxon in its arrangements. But it is of the early features that we have to talk, and the tower arch at Sompting easily carries us to the chancel arch at Worth. Here we have no Primitive tower, but we have a Primitive church unaltered in its ground plan, except by the addition of a modern side tower. The church was described some years back by Mr. W. S. Walford, in the *Sussex Archaeological Collections*. Since then a "restoration," while making some foolish innovations, has brought to light some ancient features which Mr. Walford could not have seen. The church was, and still remains, a cross church without aisles and with an apse to the chancel. There was no western or central tower; but a tower had, at some time or other, grown over the north transept, producing that effect of an imperfect Exeter, Ottery, or Geneva, which is to be seen at Somerton and some other churches in Somerset. After the little church at Bradford-on-Avon, the church at Worth comes nearer than any other to a perfect example of an English church of this Primitive Romanesque style. It is the only one in which we can judge of something like its general effect on a greater scale than that of Ealdhelm's *ecclesiola*. And it is wonderful what true dignity there is about its simple and massive forms. We suppose we must call the work at Worth rude, which we can hardly call that at Sompting; at any rate, it is much plainer. The ground-plan of the church gives us three considerable arches; those of the transepts, lower and narrower, are perfectly square and plain; the chancel arch, wide and lofty, has a huge half-column, with a very heavy abacus very plain, with none of the volutes and foliage of Sompting. Nor are we without doorways and windows to match; the "restoration," whatever else it has done, has brought both to light. There is a tall, narrow, very square-edged doorway on each side, and three windows, two on the north, one on the south, which made one hardly believe one's eyes. They are coupled windows with a central baluster, very plain and heavy. They have been touched up more than enough during the "restoration," but the forms have clearly been kept, and one window seems hardly to have been meddled with at all. This form is what we look for in a belfry window or in a triforium, where the opening has not to be glazed; it seems strange as an ordinary window. They are now glazed, and the effect is very odd; anciently they were doubtless closed by shutters. Strange as they seem, these are identical with a long train of Italian examples—from windows of their own type in St. Stephen's at Verona onwards—where windows are divided by a shaft, and the glass made somehow independent of the window. Plain Englishmen may prefer a mullion, an institution devised for the express purpose of holding the glass in the window; but Ruskinian fashion seems against them. Here, to be sure, we see Englishmen, and doubtless very plain Englishmen, doing the same thing ages back; but then, when Worth church was built, mullions had not been invented. But anyhow the stateliness of the interior of Worth church, with its primitive windows and arches unmixed by later work, is really amazing. For some part of its effect we must in fairness thank the modern restorers. But while we thank them wherever they have brought Primitive work to light, we do not thank them where they have brought in work out of their own heads. The apse had been recast in later times by inserted windows and by clumsy buttresses which hid the pilaster-strips. As these last were not needed for safety—for *solvitur stando*—it was surely right to take them away; it was surely wrong to take away the inserted windows to put in fancy ones. As it is, we have the strips all round, save where the modern tower comes in, all plain and square, rising from a double plinth. The transepts should be noted, as showing the great antiquity of a local South-Saxon feature, to be seen at Sompting and many other places. This is to make something or other east of transepts for the reception of altars, either projecting chapels or mere recesses in the wall. Here at Worth we have the fashion, not of projecting chapels but of recesses, carried up to very early times. How early ages we decline to guess; but Worth looks in everything far earlier, as it certainly is far ruder, than Sompting.

Now Worth carries us on to two churches in the same shire, two of the very smallest size, Woolbeding and Selham. At Woolbeding the nave, without any other Primitive features, has the strips throughout. Selham is doubtless of the twelfth century, and must pass as Norman; but it is Norman of a kind distinctly influenced by earlier forms. The chancel arch, instead of Norman nook-shafts, has a half-column with a very heavy abacus, certainly akin to the chancel-arch at Worth and to the tower-arch at Sompting.

We will end with Guildford. Here below the castle mound with its Norman keep, a Norman keep well worth study, lies the church of St. Mary on the slope of the hill. Here a building of considerable size has gathered in a strange way round a small kernel of the Primitive style. Even outside one can see that the now central tower has strips, though no external Primitive windows.



But it is a chance whether anybody would see them, unless he were put up to look for them. Inside the case becomes clearer. It somewhat reminds us of the way in which the great church of Laval, lately made cathedral, has gathered round an earlier tower. Only at Laval the tower was central from the beginning; at Guildford it was originally western. A nave has grown to the west; the nave of the original church has become the choir; apsidal aisles, well worth notice in themselves, have sprung up on each side of it: the central body, once nave, now choir, has been cut short to the east, and it is said once to have had an apse itself. All this change began very early. A plain Norman arch—the plainest Norman shows its difference from the earlier style—has been cut through the ancient tower on the north and south sides. The strips are cut through; so are two big rude windows, one on each side but not opposite to each other, with the double splay, one of the features of the style which went on in Germany throughout the twelfth century. Whatever the Norman builders designed, they did not build transepts; there is no sign of their eastern walls. In the walls of the present choir are signs of a plain window on each side, and at the point where the choir is cut short there are signs of something else, whether the beginnings of other windows or not is not quite clear. That these are parts of an ancient aisleless nave contemporary with the tower there can be no reasonable doubt. Over the present western arch of the tower there are faint signs of a wide round arch, but the signs are so faint that it is impossible to say whether it belongs to the original work or to the Norman reconstruction. But the latter is far more likely. There could be no motive for so wide an arch in the western face of a western tower.

Here then are four marked examples of a Romanesque style, distinct from Norman, earlier than Norman, though some of its examples are contemporary with Norman buildings. Here is also at Selham a fifth building which shows the way in which the earlier style sometimes influenced the Norman style which succeeded it. In all this there is nothing wonderful to anyone who looks at the matter with a historical eye; but, it will doubtless always be puzzling to those who think that all “the Saxons” lived at one time, and that the short-lived race became extinct in 1066, most likely on the sea-shore at Hastings.

### THE LYON COURT, EDINBURGH.

THE utility of the Lyon Court having been questioned in Parliament, Mr. Grant, the Carrick Pursuivant at Arms, has endeavoured to defend the institution. He says:—

The Lyon King of Arms, as all educated men ought to know, presides over heraldry in Scotland, as Garter King of Arms does in England, and Ulster King of Arms does in Ireland. Whatever fosters the chivalric sentiments of the people elevates their character—and that heraldry is closely associated with such principles every one will, I hope, admit. The insignia of the nation, as well as the heraldic bearings of families, have for many ages been objects of veneration and interest to a large portion of the people. In voting the Supplies a few days ago, certain persons who see everything from a Northampton point of view objected to the small vote for the officers of the Lyon Court. There did not appear to be any one present in the House possessed of sufficient information to explain that this Court is not an expense to the nation, even as a question of pounds, shillings, and pence. The fees obtained for patents of arms and from other sources nearly pay all the expenses, and if to this source of revenue is added the duty paid in Scotland for license to use arms, Government makes a clear profit out of this question of about six thousand pounds a year! I do not grudge the cost of the English or Irish establishments, whatever it may be, and I think that such men as Sir Albert Woods, Garter King of Arms, and Sir Bernard Burke, Ulster King of Arms, are worthy of their dignities and offices. But let me urge that although the Scottish Lyon King is equally entitled with these gentlemen to the dignity of knighthood, no such honour has been conferred upon him. Mr. George Burnett, advocate, has occupied the Scottish office ever since the death of the Earl of Kinnoull, in 1866. He is a man of great literary merit, having edited many works of acknowledged antiquarian value, and particularly the State Papers and Exchequer Rolls of Scotland from the twelfth century. These works are accompanied by elaborate indexes, prefaces, and valuable notes, and form a great many large volumes. Surely his position and services entitle him, equally with his English and Irish brother Kings of Arms, to the dignity of knighthood. May I humbly call the attention of Her Most Gracious Majesty, as the fountain of all honour, to this oversight. It is not only the Lyon King who adds dignity to the Lyon Court—James Lorimer, Lyon Depute, is the distinguished Professor of Public Law in the University of Edinburgh. He is the author of several valuable works on the law of Scotland, and was for a number of years editor of the *North British Review*. It is mainly due to his writings that the constitution of the Universities of Scotland was so altered as enabled them to become capable of representation in Parliament, thus elevating their status and adding to their prosperity. In conclusion, I must not omit to mention Mr.

Robert Riddle Stodart, the Lyon clerk, whose beautiful work, in two folio volumes, “Scots Arms,” is a most valuable contribution to the heraldry of the country.

### THE PROPOSED WAR OFFICE AND ADMIRALTY.

ON Monday in the House of Lords, Lord Stratheden and Campbell asked Her Majesty's Government whether it was intended in the present year to enter upon operations under the Public Offices Site Bill. He thought his question was justified by the extraordinary expense proposed to be incurred under the Bill. Lord Thurlow said, in reply, that the First Commissioner of Works proposed very shortly to invite a competition of architects for the new buildings for the War Office and Admiralty, which were to be erected on the Spring Gardens site; but he was to add that no buildings would be erected or commenced until the next financial year, when a vote for the purpose would be presented to Parliament, and a full opportunity would be given for discussing the vote on its merits. With regard to the Parliament Street site, there was a distinct determination in the Office of Works to widen Parliament Street in the manner proposed. When that site was cleared—and it would probably be some time before that happened—the site would be exclusively devoted to the erection of such buildings as banks, clubs, insurance offices, and other buildings, with a fitting architectural elevation which would have to be approved by the Office of Works as suitable to the surroundings of that neighbourhood. When that was done, there would be ample warning given for the discussion of the subject. Lord Redesdale said that in a short time proposals from architects would be received for the erection of a new War Office and Admiralty on the site already sanctioned, and money would be required for that purpose next session. He confessed he was sorry to hear the conclusion at which the Government had arrived with regard to the widening of Parliament Street. He did not want clubs, banks, and hotels there. Such plans would be extremely injurious in a variety of ways. Now that public offices were in immediate contiguity to Parliament Street, he had hoped that other public offices would be erected, so as to be in the immediate neighbourhood of the Houses of Parliament. The proposal of the Government was an extremely injurious and unfortunate one.

### THE SHAPIRA MANUSCRIPTS.

A FRAGMENT of the manuscripts of a new version of Deuteronomy, the property of Mr. Shapira, has been examined under some difficulty by M. Clermont Ganneau, the French *savant*, and it is declared by him to be a forgery. The following are his conclusions, as expressed in a letter to the *Times*:—

The fragments are the work of a modern forger. This is not the expression of an *à priori* incredulity, a feeling which many scholars must, like me, have experienced at the mere announcement of this wonderful discovery. I am able to show, with the documents before me, how the forger went to work. He took one of those large synagogue rolls of leather containing the Pentateuch, written in the square Hebrew character, and, perhaps, dating back two or three centuries, rolls which Mr. Shapira must be well acquainted with, for he deals in them, and has sold to several of the public libraries of England sundry copies of them, obtained from the existing synagogues of Judea and of Yemen.

The forger then cut off the lower edge of this roll—that which offered him the widest surface. He obtained in this way some narrow strips of leather with an appearance of comparative antiquity, which was still further heightened by the use of the proper chemical agents. On these strips of leather he wrote with ink, making use of the alphabet of the Moabitish stone, and introducing such “various readings” as fancy dictated, the passages from Deuteronomy which have been deciphered and translated by M. Ginsburg, with patience and learning worthy of better employment.

That which put me on the scent was the presence—ascertained by me at first sight—on the fragments of an important detail, of which I had not at first understood the full significance. The lines of Moabitish writing are arranged in the shape of columns, separated by vertical creases in the leather—that is to say, by creases perpendicular to the general direction of the writing. On the right and left of each of these folds I had noticed two vertical straight lines, drawn with a hard point, as guides for the vertical margins, starting from the upper edge of the strip, and extending to the lower edge, which they do not always reach. The Moabitish forger had not paid much attention to these extremely fine lines, which have scratched the leather in an almost invisible but indelible manner, and the lines of Moabitish characters, instead of being confined by this drawing, have no relation to it. Sometimes they pass over the lines, sometimes they rest on the inner sides of



them, both at their beginning and ending. The forger was obviously guided in observing the limits of his space, not by the vertical marginal lines, but by the intermediary creases. If, however, we compare these strips of leather with one of the synagogue rolls of which I spoke just now, the explanation of this mystery will be made plain to us at once.

These rolls consist of large pieces of leather (generally sheepskin) sewn end to end, forming enormous strips, which may be 30 or 40 mètres in length, and with a breadth of 16 centimètres or more.

The text of the Pentateuch, in the square Hebrew characters, is arranged in regular parallel columns containing some fifty lines each. At the top a horizontal margin is left, and at the bottom another horizontal margin, everywhere wider than the upper one, both extending for the entire length of the roll. This lower margin, to take an example, on a roll in the British Museum coming from Jerusalem and bearing the number 1,460, measures eight centimètres in height. The columns of the text separated by intervals, which, in the roll instanced by me by way of comparison, measures about four centimètres, are marked out with the stylus. The horizontal marks along which the square Hebrew characters are brought into line are confined on the right and left by two long vertical lines, traced in the same manner, which for the most part cross the first and the last horizontal line, and jut out into the upper and lower margin. This is not all. Between each column and the next one the leather has a vertical crease, which runs from top to bottom of the roll. It is these ends of the vertical lines drawn with the stylus, and the peculiar creases which divide them which we meet with on the long narrow Moabitish strips whereon the forger has written his Moabitish characters.

There is more yet. I have said that the large pieces of leather of the synagogue rolls were sewn end to end. Now, among the Moabitish strips, I saw at least one where this seam still exists. I need not point out how interesting it would be to examine the character of the thread. Finally, one sees that on the Moabitish strips one of the two edges, either the upper or the lower, is fringed and ragged. It is the original lower edge of the roll which furnished the raw material to the forger. The second edge, on the other hand, is sharply cut with a penknife or scissors; it is the cutting made by the forger immediately under the last line of the square Hebrew characters.

I advise all the impartial scholars who would thoroughly inform themselves as to this gross imposition, and to whom may be permitted an examination which is denied to me (I know not, or rather, I know very well, why), to take the suspected strips, and to lay them against the lower edge of one of the synagogue rolls preserved at the British Museum. The trick will stare them in the face. I will also beg my more favoured fellow-students to be kind enough, in order to throw complete light upon a problem (which is no longer one to me), to make certain important investigations, especially the following:—

- (1) To ascertain whether, by chance, there does not remain on the upper portion of the strips traces of the tails of the square Hebrew letters, especially of the final letters, which, as we know, descend below the normal line.
- (2) To see if the back of the leather does not materially differ in appearance from the face of it; and whether it has not been left in the raw state, as on the synagogue rolls.
- (3) To take the average height of all the strips, in order to obtain from them the greatest height, which will enable us to determine the height of the original margin of the roll (or the rolls) that supplied the forger. I can at once affirm that on this roll the columns of square Hebrew characters were from 10 to 11 centimètres in breadth, and were separated by blank intervals of about  $4\frac{1}{2}$  centimètres in breadth.
- (4) To ascertain the description of leather, and above all of the thread in the seams.

Nothing is more easy than to effect the experimental examination which I suggest. Let there be given me a synagogue roll, two or three centuries old, with permission to cut it up. I engage to procure from it strips in every respect similar to the Moabitish strips, and to transcribe upon them in archaic characters the text of Leviticus, for example, or of Numbers.

### THE LATE DR. JOHN A. SMITH.

ON the 17th inst., Dr. John A. Smith, one of the secretaries of the Scottish Society of Antiquaries, died in Edinburgh. The *Scotsman* says that as an archæologist, Dr. Smith, while possessing a wide knowledge of the whole subject, was acknowledged by persons versed in the science of antiquities, to be the best informed man in the country regarding that branch of the science which deals specially with the remains of extinct animals in Scotland. He was vice-president of the Scottish Society of Antiquaries from 1870 to 1873, as also from 1875 to 1878, and for many years was one of its secretaries—first as the colleague of Dr. Wilson from 1852, then in conjunction with Dr. John Stuart, and latterly as the colleague of Dr. Arthur Mitchell and of Mr. J. R. Findlay. During his long connection with the Society, Dr.

Smith was a frequent contributor to its "Transactions;" indeed for many years no volume appeared without containing something from his pen. The more noteworthy of the papers or notes read by him to the Society related to the discovery of remains of the reindeer, of the great auk, and of the elk, in Scotland; the horn of a rhinoceros, said to have been found in Forfarshire; the skull of a bear, found in a moss in Dumfriesshire; the remains of the raven, found in Linlithgowshire; the origin of our domestic cattle and the wild cattle of Great Britain; copper and bronze anvils, massive silver chains (of which he gave an elaborate description), bronze Celtic armlets, ornamental stone balls and bronze sickles, together with notices of many other "finds" in different parts of Scotland. Dr. Smith was for many years editor of the "Transactions" of the Society, and in that capacity he officiated for a considerable time along with the late David Laing, who was one of his most valued friends. At the meetings of the Society, Dr. Smith's ample and varied knowledge enabled him, in a few acute and well-chosen remarks, to add to or illustrate almost every topic forming the subject of paper or discussion; though his modesty often restricted him to a brevity which other Fellows may well have envied as not being able to imitate.

### REVIVAL OF VENETIAN INDUSTRIAL ARTS.

A REPORT has been prepared by Signor de Zuccato, the British Vice-Consul at Venice, upon the industrial arts in that city. It is as follows:—

*Glass Manufacture.*—The art of manufacturing glass appears to have been brought to the Venetian lagoons by the early settlers from the mainland. Glassmaking has always been the principal industry of Venice and Murano, and some of the Venetian products have long enjoyed a world-wide fame. Beads, spun-glass, blown-glass, enamels, and mosaics, looking-glasses, &c., are all made in Venice.

*Beads.*—It is said that the invention of beads dates from the thirteenth century, and is due to two Venetians—Miotti and Imbriani—who were urged to make experiments by the celebrated Venetian traveller, Marco Polo. Under the Venetian Republic, and for some years after its fall, the exportation of beads had not reached the importance it has now attained. This was perhaps owing to the smallness of the furnaces and to the difficulty and length of the technical processes required for the composition of the paste. The Morelli, however, who, in 1670, were the principal bead manufacturers, had four ships at sea, carrying beads to the East on their own account, and they became so rich that in 1766 they entered the rank of the Venetian nobility on payment of a sum of 100,000 ducats to the Republic. Since 1815 this industry has become so important as to give at the present time employment to about 15,000 persons. The traffic is carried on with all the world, but the principal exportation of beads is to the ports of Asia and Africa. An extraordinary stimulus was given to this industry a few years ago by the prevailing taste for beads for trimming ladies' dresses. A great extension of the manufacture took place, and the labour was paid so high that all who could do so gave up their usual trades for bead-making. But when the demand for beads declined, most of the workmen who had been allured by fancy wages to the bead manufacture were thrown out of work and compelled to return to their former occupations. Whatever be the cause, beadmaking has always been the special privilege of Venice, in spite of all foreign attempts to manufacture this article elsewhere. Beads are sold under the following denominations: 1. "Conterie in perle," which are small perforated balls made either of glass or enamel. 2. "Jais," glass tubes of very small bore cut into short lengths. 3. "Pipiotis," jais cut into facets. 4. "Maca," a sort of pipiotis made in a mould. The wages in glassworks are for a first master about 8 francs a day, for a second master  $4\frac{1}{2}$  francs, and for the ordinary workmen from 2 francs to 3 francs a day. During the last five years the average annual exportation of beads has been 25,000 quintals, of the approximate value of 5,500,000 francs. The principal substances imported from the United Kingdom for bead-making are nitre, minium, sulphate of soda, and arsenic.

*Spun-glass.*—"Vetro filato" is made of the vitreous paste reduced to long slender filaments, which are then twisted into baskets, bonnets, girdles, garters, bands, &c.

*Glassblowing.*—The almost lost art of glassblowing, which flourished at Murano during the early part of the Renaissance, and the decay of which was due to the growing taste in the eighteenth century for the imitation of crystal, has only been revived of late years. The products of this branch of industry are known under the name of "soffiati ordinari," which are blown bottles, glasses, and other articles for domestic purposes, and "soffiati artistici," artistic ware of all shapes, admirably fashioned after the old models or in modern forms, richly decorated, occasionally with grotesques and enlivened with delicate and brilliant colouring. Nearly all the kinds of ware anciently known at Murano, such as "filagrana," "fiamma," "ritorte," "opale," "morise," "reticelle," &c., have been successfully reproduced by the modern artificers.



A large factory has been opened at Murano for the manufacture of glassware for household purposes. The company which has started the works is termed "Vetzeria Veneziana in Murano." It is to continue for twenty-five years from the date of the royal decree approving its constitution. The nominal capital is 700,000 lire, divided into fifty-six shares of 1,250 lire each, half-paid up, and the balance at the call of the council of administration. Fifty shares have already been taken up, of which eighteen are held by English gentlemen desirous to promote the industrial progress of Venice, and the remainder principally by Venetians.

**Mosaics.**—By the term "mosaic" is meant a sort of inlaid or tessellated work, an imitation of painting, formed by small pieces of marble, glass, enamel, or precious stones, such as lapis-lazuli, malachite, &c., of varying shades and colours carefully inlaid and fixed on cement. The art of working in mosaic was probably known in very early times, and was extensively practised in Greece and Rome at the time of the first emperors. Later on mosaics were widely used in the civilised parts of Europe for decorating the walls and vaults of churches, &c., and splendid relics of the mosaics executed in those times are still extant.

There is no place in the world, however, where this art has been more cherished than at Venice. Here Byzantine and Greek artists revealed to the Venetians all its secrets, and here was founded the Venetian school of mosaicists, who for centuries have covered the basilica of St. Mark with masterpieces of decoration, both within and without the building. But the glory of bringing the mosaic art to its height is due to the brothers Francesco and Valerio Zuccato, sons of Sebastiano Zuccato, master of Titian, who flourished in the fifteenth century. These artists executed their mosaics on cartoons drawn by themselves and by the most celebrated artists of the period. Among the numerous mosaics executed by them in the basilica may be mentioned the *Visions of the Apocalypse*, which have just undergone restoration. During the execution of the works in the cathedral the doge offered a prize of 500 ducats for the best reproduction of a particular cartoon. The competitors were Francesco Zuccato, Bartolomeo Bozza, and Dominico and Gian Antonio Bianchini. Titian, Tintoretto, Paolo Veronese, and other painters were directed by the Republic to inspect the works and to pronounce their verdict. The prize was awarded to Francesco Zuccato, and his work was presented by the doge to the Duke of Savoy. The mosaic executed by Bartolomeo Bozza is still preserved in the treasury of the basilica.

Ancient mosaic work was divided into lithostratum, vermiculatum, alexandrinum, &c., according as it was made of marble or other precious stones, and according to the figures or designs it represented. Modern mosaics are now distinguished under the two following heads: inlaid mosaic, and monumental or Byzantine. The former, which is made thoroughly smooth by fixing on to the cement the stone or enamel pieces with their edges perfectly close and adhering together, and by the subsequent polishing of the entire surface of the work, is generally used for making personal ornaments or fancy goods. The second is made of pieces which, not being cut into regular or geometrical shapes, cannot be closely united one to the other, so that the joints between them are visible. This was the mosaic generally used by the ancients, and has now been adopted for architectural decorations.

**Coloured Enamels.**—Coloured enamels for mosaics are composed of the same ingredients of which glass is made, with some other mineral substances, which, when fused with them, impart to the vitreous paste the required degree of opaqueness and colour. Thus they are rendered blue by oxide of cobalt, yellow by oxide of lead, uranium or wood-coal, green by oxide of copper or of chrome, &c., but the greater or less degree of their hardness and opaqueness and the quality and beauty of their colour depend also on the degree and continuance of the heat to which the composition is subjected in the furnace.

Gold and silver enamels are made in a different manner. On the flat surface of a piece of thick glass or enamel is laid a leaf of gold or silver which is made to adhere by the action of heat. A delicate film of the purest glass, either transparent or of any shade of colour, is then spread over it. When the three layers are fused they become thoroughly united, the metal, however, appearing in all its brightness, the glass with which it is covered being nearly imperceptible.

The mosaic art, which had declined with the decadence of the Republic and was nearly lost at its death, was revived by the strenuous efforts of Signor Lorenzo Radi, and afterwards by Signor Salviati, who by the aid of some English gentlemen established a large factory for the manufacture of mosaics about the middle of this century.

There are now in Venice three great establishments making mosaics for artistic mural decorations: 1. The Venice and Murano Company; 2. Salviati & Co.; 3. The Societa Musiva Veneziana.

The first is supported by English capital and gives employment to about one hundred workmen.

Among the recent works executed by this company, in addition to the numerous commissions received from England for church and other decorations, may be noticed the restoration of the *Visions of the Apocalypse* in the church of St. Mark; the entire reconstruction of two superb mosaics of the twelfth century in the ancient cathedral of Torcello, and the reproduction of the *Good*

*Shepherd*, a celebrated mosaic of the eighth century, existing in the tomb of Gallia Placidia at Ravenna.

The two other manufactories are also much esteemed for the perfect execution of their mosaics.

Other less important factories also exist which produce mosaics representing flowers, fruits, animals, landscapes, &c., which are chiefly made into brooches, bracelets, tables, and other similar articles.

**Pottery.**—There is no manufactory of earthenware in this province, although it has been ascertained that the mud of the lagoons would furnish an excellent material. An opening might perhaps be found here for the investment of British capital.

**Artistic Castings.**—The ancient art of fusing metals for the production of artistic articles, which flourished at Venice at the time of the Renaissance, has been revived with great success. Thirteen factories are now reproducing, after ancient models, artistic bronzes, candelabra, plates, armour, swords, etchings, chiselled works, &c., for which there is a considerable demand, which is not confined to Italy.

**Furniture.**—A new feature of Venetian industry, which appears to be encouraged by the English on a large scale, is the imitation of antique furniture in ebony and ivory, for which materials pearwood and bone are substituted. Carved chairs, book-cases copied from the antique, figures of negroes and others used as lamp-stands, hanging putti supported by a ribbon of wood and holding baskets for flowers, &c., are also made in the Venetian workshops with much artistic feeling and of excellent execution.

**Lace.**—Owing to the indefatigable exertions of some distinguished ladies, this industry, once so celebrated in Venice, and which had altogether sunk into decay, has been revived. Schools and manufactories have sprung up, and about three thousand women at Venice, Pelestrina, Murano, Burano, Chioggia, and Caorle are now employed in lacemaking. Their earnings range from 50 c. to 4 lire a day, and the value of the lace produced amounts to 200,000 lire per annum.

**Copying of ancient Brocade.**—The last speciality of Venice is the imitation of old damask. In the palmy days of the Republic the Venetian looms produced magnificent stuffs, embroidered with gold, silver, or silk, which the doges sent as gifts to foreign potentates. The art, which was entirely lost, was rediscovered in 1857, and is now recovering some of its ancient splendour.

## NEW WORKS AT HAMBURGH.

PLANS for the improvement of Hamburg have been lately submitted to a technical commission appointed by the German Government, and one has been accepted which will require an expenditure which is estimated at 106,000,000 marks. Bonded warehouses are to be extensively built on the borders of the outer Customs portion of the town. For the realisation of the project a great part of the old town will be pulled down, leaving, after deducting the space required for the free port canal which will divide the two portions, a building area of 43,000 square metres for warehouses and official buildings in the free port. From the upper port to the inner one, a Customs canal will be constructed  $2\frac{1}{2}$  miles in length, 45 metres in breadth, and 15 metres in depth, which will be bordered on either side by broad quay-streets. The entire ground of the Kehrrieder, Brook, Kleiner Fleth, Pickhuber as far as the Bei St. Annen, and a part of that street, will be included in the free port territory. The ground thus obtained will be cut by a straight canal of 25 metres in width, joining the future free port at its western end, discharging at its eastern end into the Brookthor port where the same is still in the free port boundary, so that those vessels coming from the free port canal can either pass by the eastern half of the Brookthor port into the duty-bound waters after having been examined by the Customs, or they may continue their voyage by way of the Magdeburger port. The southern shore of the Customs canal, as well as the centre parts of its three sides, will be supplied with Custom-houses all along. These alterations will involve the removal of upwards of 1,500 houses and buildings, tenanted by 15,000 persons, entailing on their part the finding of new residing places and entire loss of local custom to such as are engaged as retail shopkeepers. The compensation claims are therefore likely to be very heavy. Towards the impending estimated cost of 5,000,000%, the Imperial Government will contribute 40,000,000 marks, or 2,000,000%, which is to be paid to the Hamburg State in equal annual amounts spread over a term of ten years. A general estimate of the details is being drawn up, and as soon as this is in the hands of the Senate that body will commence negotiations with the Empire regarding the same, although it was stipulated that the incorporation treaty should not, if necessary, be enforced until October 1888. The actual works will be commenced at as early a date as possible. The expenses to be met by the Hamburg State will be raised by loans, probably bearing interest at  $3\frac{1}{2}$  per cent., but this interest must not be regarded as an additional burden on the Hamburg taxpayers, since as soon as the incorporation takes place the annual payment of 250,000% now made by this State to the Imperial treasury for her exemption



from the Zollverein will cease. From a fiscal point of view, the Hamburg Government, therefore, may be said to have gained very good terms, but the result to the Hamburg trade is too much a matter of doubt for any opinion to be expressed.

## SANITARY REGULATIONS IN SAN FRANCISCO.

THE following regulations by the Board of Health are now in operation in San Francisco:—

1. All material must be of good quality, and free from defects. The work must be executed in a thorough, workmanlike manner.

2. The arrangement of soil and waste-pipes must be as direct as possible. The drain, soil, and waste-pipes, and the traps should be exposed to view for ready inspection at all times, and for convenience in repairing.

3. Every house or building must be separately connected with the street sewer by a cast-iron or iron-stone pipe extending out to the line of the street; and in the case of buildings erected on the line of the street, said cast-iron pipe shall extend three feet beyond the front walls or any area wall. From the points above designated to the street sewer, the drain shall be continued either by the above-mentioned cast-iron pipe or by a vitrified iron-stone pipe laid at a uniform grade from the street sewer to the point of juncture with the cast-iron pipe. All joints on said iron-stone pipe shall be made with Portland cement, and each joint of pipe when laid must be properly cleaned on the inside by a suitable scraper before the succeeding pipe is put in place. All joints on a cast-iron pipe shall be made with a suitable packing of hemp or oakum, and run full with molten lead and properly caulked.

4. Every building hereafter erected must have the house drain constructed of cast-iron when it lies under the building; when the drain lies under any open space it may be of iron-stone pipe. The house drain must be made of cast-iron, with a fall of at least one-quarter of an inch to the foot; it should run along the cellar wall where practicable, or if laid under the lower floor of a building should be hung in iron straps securely fastened to the floor joints; it should be laid in as straight a line as possible. All changes in direction must be made with curved pipes, and all connections with Y-branches and one-eighth bends, with a trap placed under the side-walk, and have a curbed casing, so as to be easy of access at all times. The trap must be provided with a fresh-air inlet on the house side of the water seal, of at least 4 inches in diameter, leading to the outer air. No brick, sheet metal, or earthenware flue should be used as a sewer ventilator, nor shall any chimney flue be used for this purpose.

5. Every soil and waste-pipe shall be of cast-iron, and must extend at least 2 feet above the highest part of roof or coping of undiminished size. There shall be no traps or vertical soil or vertical waste-pipes.

6. All cast-iron pipe and fittings must be coated both inside and outside with coal-tar pitch, applied hot, or some other equivalent substance.

7. All iron soil or waste pipes, before being covered up, must have all openings stopped, and be filled with water and allowed to stand until inspected and approved. All connections of lead with iron pipe must be made with a brass ferrule of the same size as the lead pipe, and caulked into the iron pipe, and connected to the lead pipe by a wiped joint. All connections of lead pipe should be wiped joints.

8. Every water-closet, sink, basin, bath, or set of wash trays or other vessel connected with the drain pipes, must be separately and effectively trapped. The traps must be placed as near the fixtures as practicable.

9. Traps must be protected from syphonage by special air pipes of lead, wrought iron or cast iron, not less than the size of waste pipes, and if to supply air to traps of water-closets, not less than 2 inches in diameter; if for a single closet and the length does not exceed 15 feet, the size to increase with the length of pipe and the number of closets. These pipes must extend 2 feet above the highest point of roof or coping, or they may be branched into the soil pipe above the highest fixture; they may be combined by branching together those which serve several traps, provided that said branches enter a pipe whose area is equal to the combined areas of all the branches. These air-pipes must always have a continuous slope, to avoid collecting water by condensation.

10. Every safe under a basin, bath, urinal, water-closet, tank, or other fixture, must be drained by a special pipe of lead or wrought iron, not directly connected with any soil, waste-pipe, drain or sewer, but made to discharge outside the house.

11. Rain-water leaders must never be used as soil, waste, or vent-pipes, nor shall any soil, waste, or vent-pipes be used as a rain-water leader. All leader-pipes must discharge into a trapped intercepting hopper, or on the surface of the ground, supplied with a water-faucet.

12. No steam exhaust will be allowed to connect with any drain, soil, or waste-pipe.

13. All waste-pipes from all interior plumbing, exclusive of water-closets and kitchen sinks, shall discharge into an open-trapped hopper.

14. On and after the first day of August, A.D. 1883, all plumbers doing business in the City and County of San Francisco shall register, pursuant to the provision of the Act of the Legislature, approved March 16, 1883, at the Office of the Board of Health.

15. Every master plumber, before he shall be allowed to be registered, shall give a bond to the State of California in the sum of five hundred dollars, with two good and sufficient sureties, for the faithful discharge of his duties as plumber; which said bond shall be approved by and filed with the Board of Health.

16. There shall be appointed by the Board of Health an Inspector of Plumbing and Drainage. He shall take and subscribe to an oath that he will faithfully perform the duties of his office, and shall, before entering upon his duties, execute a bond to the City and County of San Francisco in the sum of five thousand dollars, with two good and sufficient sureties, conditioned for the faithful performance of the duties of his office, and for the benefit of persons aggrieved by his acts or neglect. Said bond shall be approved by and filed with the Board of Health.

17. The salary of the Inspector shall be fixed at one hundred and twenty-five dollars per month.



### Trade Circulars.

SIR,—As a provincial architect, I am astonished at the quantity of trade circulars that reach me daily; nearly every post brings a batch—large sheets, small sheets, books, show-cards, pamphlets, and samples—and if I were to preserve all I receive for future reference, I should require an extra office and clerk for arranging them, to say nothing of the wall space to hang the cards upon; the result is that the waste-paper basket receives by far the larger portion. This to me appears to be a great waste of cash, and must come out of the profits, although I am quite alive to the importance of being in possession of the various manufactures, and I carefully scan all I receive, and keep large piles for reference, the accumulation of nigh upon forty years; but it often occurred to me that if something like order were adopted by the senders, in the sizes of their documents, they would be much more likely to be saved, and much easier for reference. Suppose, for instance, that all documents were issued foolscap size, a pile of these would not be unsightly, and would fit the ordinary foolscap receptacles, and references would be facilitated by turning over leaves all the same size, instead of which my shelf of trade circulars, although kept as well as can be, is a complete muddle, and to find what you require is like searching for a needle in a bundle of hay. As an instance, this morning's post brought me two documents, one a book 6 inches by 3½ inches, and another a sheet 3 feet 3 inches by 2 feet 2 inches. The question is, What am I to do with them? for they are both worth saving.

Bristol, August 16, 1883.

Yours, &c.,

H. M.

### LEGAL.

#### Nottingham County Court.

(Before Mr. G. B. BRISTOWE, Judge.)

BALL v. HOLLINGWORTH AND CLARKE.

THE EMPLOYERS' LIABILITY ACT.

The plaintiff was a joiner employed by the defendants, who are builders. He was engaged in preparing scaffolding for an iron roof. While so engaged he placed his foot on an iron distance-rod, which was loose, and, falling, sustained concussion of the spine. He claimed 200*l.* damages. After the plaintiff and his witnesses had given evidence, counsel for defendants submitted that he had no case to answer, as it was not brought within the provisions of the Act. He contended that, even according to the plaintiff's own statement and the evidence of his witnesses, there was sufficient proof of contributory negligence on the part of the plaintiff himself to relieve the defendants.

The Judge said that the plaintiff was employed to do work which required skill, care, and caution on the part of the person doing it. There could be no doubt that the distance rod was unfastened, and could be seen by anybody who looked at it. He could not see how the case came within the provisions of the Act of Parliament. Sitting in his capacity of judge and jury he thought that there was not sufficient evidence to justify him in saying that there was a case to go to the jury. If there had been a jury, he would have sent the case to them with regard to the question of contributory negligence. He did not think that there was any question of a defect in the ironwork, and he must find a verdict for the defendants on the plaintiff's own case. The Act of Parliament under which these proceedings were brought was a most beneficial one, but it would be a safe plan for plaintiffs in such cases to consider carefully before bringing actions whether they were not guilty of negligence themselves.



## CHURCH BUILDING AND RESTORATION.

**Steeple.**—The foundation-stone has been laid of the church of St. Laurence and All Saints, which is erected on a site granted by the Governors of St. Bartholomew's Hospital. The new church will consist of nave, chancel, organ chapel and vestry, and south porch. The nave will be 58 feet long by 21 feet wide, surmounted at the west end by a bell-turret, this being supported by the western wall and an inner double arch supported by a column. The chancel will be 24 feet long by 17 feet wide. The walls throughout are being constructed of the old materials, worked in random, and every fragment of dressed stone is being used in for its original purpose. The period selected is the transition from Early English to Decorated. The roof will be open timbered, divided into five bays by principals, with moulded ribs resting on stone corbels. The chancel roof will be boarded and divided into panels by intersecting ribs. Both roofs will be tiled. The nave will be lighted by four two-light windows and seven single-light windows on the north and south sides, and two single-light windows at the west end. The chancel will have a three-light east window, and one three-light and two single-light windows on the north and south sides. The turret at the west end will be 10 feet square, the bell-chamber being framed in oak, with lowered lights on either side, the whole surmounted by a spire, covered with oak shingles. Internally the floors will be boarded under the benches and the gangway paved. The sacristy will also be paved with tiles of a similar pattern. The organ chapel and vestry, 11 feet by 10 feet, will be on the north side, connected by a stone arch with the chancel. The porch will be of oak, with traceried sides and front. The church will be heated by a hot-air apparatus. The church will accommodate 150 adults and 56 children in the nave, and 12 adults and 14 boys in the chancel, or a total of 232. The architect is Mr. F. Chancellor, of Chelmsford, and Mr. Letch, of Braintree, is contractor.

## SCHOOL BUILDINGS.

**Bradford.**—The new Board School in Charlton Street was opened on Monday. The site has an area of 10,662 square yards, the cost being 5,331*l.* 14*s.*; the building and furniture of the school have cost 13,968*l.* 13*s.*, the total expenditure being thus about 19,300*l.* The school provides accommodation for 1,501 children. The buildings are two storeys in height, the higher girls and the infants' departments being on the ground-floor, and the elementary boys and girls' schools being upon the upper floor. The front of the building and the two ends are executed in clean cut wall-stones, with ashlar dressings, but moulding work has been sparingly used, except about the centre portion of the main elevation and the gables at each end. On the main front there are four ornamental gables and dormer windows, which have moulded pediments and terminals. The roof of the centre portion of the building is partly formed with lead flats, around which are ornamental crestings. There are three large ventilators rising from the roof, specially designed to correspond with the architecture of the building. In each division of the school there are four departments, each of which has a main schoolroom and five class-rooms, with accommodation rooms for the teachers, fitted with lavatories, &c. The class-rooms are of large size, but they vary in length, those on the ground-floor being about 46 feet long, and those on the upper floor 67 feet long. The average size of the class-rooms is about 20 square feet. A new feature in this school is the provision of two Kindergarten class-rooms. The approach to the upper school is by means of a broad stone staircase. The interior fittings of the school are of pitch pine, varnished, and the desks and seats are of similar wood. Messrs. John Moulson & Son were the contractors for the work. Mr. C. H. Hargreaves, of Bradford, is the architect of the school.

**Birmingham.**—The alterations and additions are nearly completed at King Edward's School, part of which will become a high school for girls. A new gymnasium has been erected; the hall measures about 90 feet by 40 feet, and is 40 feet high. The works have been carried out under the direction of Mr. J. A. Chatwin, architect; the contractors are Mr. Pashby for the alterations, and Messrs. Sapcote & Sons for the gymnasium.

## GENERAL.

**Mr. Val. Prinsep, A.R.A.,** has taken the Old City Library building, Worcester, for a short term, and intends to use it as a studio during his stay in Worcester.

**The Original Model** of Watson's statue of *Flaxman* in the vestibule of University College, Gower Street, has been presented to the Corporation of Carlisle by Mr. Nelson, who was formerly an assistant to Musgrave Watson.

**Battle Abbey** was on the 14th inst. visited by 1,500 people, who were admitted in batches of fifty.

**Mr. J. Honeyman, F.R.I.B.A.,** is now preparing a report on the competition plans for the proposed Town Hall at Hawick.

**Mr. G. B. Bruce, C.E.,** has been deputed to represent the Institution of Civil Engineers at the opening of the Northern Pacific Railway, United States. The Company forwarded six invitations to the English Foreign Office for disposal.

**Rochester Castle** is to be purchased by the Rochester Corporation, the sum to be paid being 8,000*l.* The property has been held on lease by the Corporation at an annual rental of 240*l.*

**The Local Government Board** have refused to lend 390*l.* to the Brecon Town Council, on the ground that the sum advanced in 1835 to build a town hall remains unpaid.

**Peterborough Cathedral.**—The foundations of the south-east pier which supported the now demolished Lantern Tower of Peterborough Cathedral were unearthed on Monday, and were found in a crumbling state many inches below the original level. A conference of the architect, the contractor, and the Chapter will be held.

**A Subsidence of Land** at Boosbeck, near Guisborough, has caused the destruction of between fifty and sixty houses.

**A Brass Tablet** has been placed in the parish church, Windsor, as a memorial of Thomas Sandby, who was one of the original Royal Academicians. The inscription records that Sandby was born at Nottingham in 1721, acted as Private Secretary to H.R.H. William, Duke of Cumberland, in his campaign in the Low Countries, and at the battle of Culloden in 1745; was appointed Deputy Ranger of Windsor Park in 1746; designed the Virginia Water, and planned the various improvements in Windsor Park during the following fifty-two years; was nominated by King George III. one of the Foundation Members of the Royal Academy of Arts in London in 1768, and elected Professor of Architecture in that institution. These offices he filled until his death at the Deputy Ranger's Lodge, Windsor, on June 25, 1798.

**The Midland Railway Company** have during the past six months expended 11,249*l.* for the enlargement and rearrangement of stations, and 18,168*l.* for reconstruction of bridges.

**Messrs. Doulton & Co.** have been awarded two diplomas of honour—being the highest awards—in respect of their exhibits of fitted sanitary appliances and artistic pottery, at the Amsterdam Exhibition.

**Mr. Joseph Constantine,** of Manchester, has, in consequence of the increase of his business, opened an office at 144 Fleet Street, London, for the sale of his patent convoluted stove.

**Messrs. Charles Williams & Co.,** the Ferry Iron Works, Cubitt Town, have taken Mr. Hugh Stanton into partnership. The style of the firm will remain as before.

**The Excavations** carried on by the French school at Athens, in the island of Delos have led to one important discovery. Near the theatre of Apollo a private house has been discovered, probably of the Alexandrine period. A court surrounded by pillars and twelve rooms has thus far been revealed. The floor of the court is of beautiful mosaic, containing flowers, fishes, and other ornaments, and in the middle of the court there is a cistern. The gate of the house and the street leading to it have also been dug out.

**A Committee of Engineers** has been appointed for the purpose of considering various matters in connection with the constitution of the Indian Public Works Department; for example, the reduction of the numerical strength of the department consistently with its efficiency, the acceleration of promotion, the offer of terms upon retirement, and the proportions in which the department shall be recruited from the ranks of the Royal Engineers, of the civil engineers from England, and of the students of the Indian colleges. Mr. Guilford R. Molesworth will preside. The committee consists of ten members, representing different classes—namely, two Stanley engineers, three from Cooper's Hill, two Royal Engineers, and three civil engineers from the Roorkee Presidency College.

**Gilchrist Engineering Scholarship.**—The Gilchrist Engineering Entrance Scholarship at University College, London, will be open to competition at the end of September. The conditions of examination are this year somewhat altered in a direction which places the scholarship better within the reach of those for whose benefit it was founded. The detailed regulations can be obtained on application to the secretary of University College. The following is a summary of them: Candidates must be under nineteen years of age, and must send in notice to compete by September 23. The subjects of examination are (1) elementary mathematics and (2) any two or more of the following five subjects: Mechanics, mechanical drawing, essay on one of three given subjects connected with mechanics or engineering, French or German, the use of tools, either carpenters' tools, or the lathe (wood or metal), or the file. The scholarship is of the value of 35*l.* per annum, and is tenable for two years. There is also at University College a Senior Engineering Scholarship, awarded at the close of the session, of the value of 80*l.* The regulations affecting this scholarship, as well as those of the Andrews entrance prizes, &c., can be obtained on application to the secretary.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, AUGUST 25, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."*

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

### COMPETITIONS OPEN.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

### CONTRACTS OPEN.

**ABERDEEN.**—Aug. 27.—For Supplying and Erecting of Two Gasholders and Construction of Brick Gasholder Tanks. Mr. Alexander Smith, Gas Office, Broad Street, Aberdeen.

**ABERDEEN.**—Sept. 1.—For Erection of Sheds at Waterloo Quay, for the Harbour Commissioners. Mr. William Smith, Engineer.

**ARMLEY (YORKS).**—Aug. 27.—For Additions to House. Mr. S. Jackson, Architect, Bradford.

**BALLYWATER HARBOUR.**—Sept. 5.—For Building Stone Beacon on Sculmartin Rock. The Secretary, Irish Lights Offices, Dublin.

**BATLEY.**—Sept. 3.—For Additions to the Grammar School. Mr. Walter Hanstock, A.R.I.B.A., Architect, Bramley.

**BECKENHAM.**—Sept. 3.—For Additions to Stables and Buildings at the Old Manor House. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

**BEDFORD.**—Sept. 3.—For Erection of a new Bridge over the River Ouse, according to Plans by Mr. J. J. Webster, C.E. Contract No. 1. Masonry, Brickwork, and Earthwork in Approaches, Abutments, Piers, Retaining Walls,

&c. Contract No. 2. Ironwork of Superstructure. Mr. T. S. Porter, Clerk to the Authority, Corn Exchange, Bedford.

**BELFAST.**—Aug. 27.—For Building Goods Shed on Donegall Quay, with Malleable Iron Roof, Cast-iron Columns, &c. Mr. W. Thompson, Harbour Office, Belfast.

**BELFAST.**—Sept. 10.—For Erection of Orange Hall in Clifton Street, according to plans by Mr. W. Batt, Architect, 4 Wallington Place.

**BRITON FERRY.**—Aug. 27.—For Additions to Chapel. Mr. H. Francis Clarke, Architect, Briton Ferry.

**CAMBORNE.**—Sept. 1.—For Building Mission Room and House. Rev. W. P. Chappel, Rectory, Camborne.

**CARDIFF.**—Aug. 27.—For Building Thirteen Cottages, Upper Grange town. Messrs. James, Seward & Thomas, Architects, 1 St. John's Square, Cardiff.

**CARLOW.**—Sept. 10.—For Chancel to Staplestown Church. Mr. J. F. Fuller, Architect, 179 Great Brunswick Street, Dublin.

**CASTLEFORD (YORKS).**—Sept. 1.—For Erection of two Schools and other Works, for the Featherstone School Board. Mr. F. W. Bradley, Clerk, Castleford.

**CHIPPING WYCOMBE.**—Sept. 7.—For Additions and Alterations to the West End Infant Board School. Mr. W. T. Pycraft, Clerk to the Board, High Wycombe.

**CLYNDU.**—Aug. 28.—For Building Board School. Mr. E. Sidney Hartland, 7 Rutland Street, Swansea.

**CREWE.**—Sept. 8.—For Erection of a Church at Crewe according to Plans by Messrs. Paley & Austin, Architects, Lancaster. Tenders to be sent to the Architects.

**DAGENHAM.**—Aug. 29.—For Building Infant School. Mr. John Hudson, Architect, 80 Leman Street, Whitechapel.

**DARLINGTON.**—Aug. 27.—For Repairing Clock Tower in Market. Mr. H. Dunn, Town Clerk.

**DURHAM.**—Aug. 31.—For Repairs to Chapel of Union Workhouse, according to Specification by Mr. J. Henry, Architect. Mr. William Lisle, Clerk.

**DURHAM.**—Sept. 7.—For Erection of Infant Board School in Giles Street, according to Plans by Mr. C. Hodgson Fowler, Architect, The College, Durham. Mr. R. Peele, Clerk to the Board.

**EDINBURGH.**—Sept. 10.—For Construction of Wet Dock. Messrs. Blyth & Cunningham, C.E., 135 George Street, Edinburgh.

**FEATHERSTONE.**—Sept. 1.—For Building Two Schools, School-house, &c. Mr. Frank W. Bradley, Solicitor, Castleford.

**GUERNSEY.**—Sept. 15.—For Erection of a Terrace of eight Houses, for the Real Property Trust. Mr. J. C. Torode, Secretary, Guernsey.

**HONITON.**—Aug. 25.—For Erection of Sick Wards at the Union Workhouse. Mr. W. J. Radford Hellier, Clerk to the Guardians, Honiton.

**LEICESTER.**—Sept. 4.—For Widening and Deepening the River Soar. Mr. J. Gordon, C.E., Borough Surveyor, Town Hall, Leicester.

**LEITH.**—Sept. 5.—For Construction of Goods Shed, measuring 196 feet by 79 feet, at the Edinburgh Dock. Mr. John Torry, 13 Heriot Row, Edinburgh.

**LONDON, E.**—Sept. 5.—For Erection of Additional Accommodation for the Indoor Poor and Casual Poor of the Parish of St. Leonard, Shoreditch, according to Plans by Messrs. Lee & Smith. Mr. Robert Clay, Clerk to the Guardians.

**MIDDLESBROUGH.**—Sept. 8.—For Construction of Hury Reservoir. Mr. Mansergh, 3 Westminster Chambers, Victoria Street, S.W.

**OSWESTRY.**—Aug. 30.—For Widening and Improving Sewage Carriers, Construction of Irrigating Channels,

Brick Culverts, and other Works. Mr. Henry Davies, Town Clerk.

**OXFORD.**—Aug. 27.—For Construction of Four Filter Beds, and other Works. Messrs. Hawksley, C.E., 30 Great George Street, S.W.

**PRESTON.**—Sept. 1.—For Building the Harris Free Library and Museum. Mr. J. Hibbert, Architect, 149 Church Street, Avenham Street, Preston.

**SHREWSBURY.**—Aug. 30.—For the Supply, Laying, and Jointing Cast-iron Pipes for Clive Hall, with Branch Services, &c. Mr. T. S. Stooke, C.E., Shrewsbury.

**SHREWSBURY.**—Aug. 31.—For Erection of a Mission-room in Cherry Orchard. Mr. A. E. Lloyd Oswell, Architect.

**SLEAFORD.**—Sept. 1.—For Construction of Reservoir. Mr. Jesse Clare, Sleaford.

**SOUTHAMPTON.**—Aug. 25.—For Strengthening Part of Jetty, Town Quay. Mr. J. G. Poole, Surveyor, 9 St. Michael's Square, Southampton.

**TONGWYNLAIS.**—Aug. 25.—For Rebuilding House and Shop. Mr. James McBean, Architect, Abertillery, Mon.

**WICK.**—Sept. 7.—For Building House. Messrs. D. & J. Bryce, Architects, 131 George Street, Edinburgh.

### TENDERS.

#### ABINGDON (BERKS.).

For Sewers, &c., at the Abingdon Workhouse. Mr. G. Winslip, Assoc. Memb. I.C.E., Engineer.

Norman, Fulham	£630	10	3
Thatcher, Abingdon	622	10	0
Buckle & Wheeler, Abingdon	615	0	0
POTTER, London (accepted)	610	0	0

#### ADDLESTONE.

For the Erection of an Hotel at Addlestone. Mr. C. H. Sparkes, Architect, Guildford.

Knight & Son, Chertsey	£2,800	0	0
Hunt & Co., Chertsey	2,500	0	0
Brown Bros., Addlestone	2,311	0	0
Martin, Addlestone	2,300	0	0
MARTIN, Addlestone (accepted)	2,300	0	0
Nesmyth, Chertsey (withdrawn)	1,996	0	0

#### AUDENSHAW.

For Sewering Guide Lane, from the boundary near to Guide Bridge Station to the Deinton and Dukinfield Branch of the London and North-Western Railway. Mr. J. H. Burton, Surveyor, Ashton-under-Lyne.

Hewitt, Newton Heath	£382	0	0
Naylor, Manchester	306	3	6
Speight, Liverpool	304	7	0
Freeman, Hollinwood	260	5	6
Burton & Sons, Ashton-under-Lyne	253	4	6
Heath, Gorton	243	3	0
Turner & Son, Heywood	240	18	6
Pendelbury, Manchester	227	13	6
Clarke, Manchester	227	0	0
Bennison, Hyde	223	0	0
HEATON, Ashton-under-Lyne (accepted)	164	11	2
Surveyor's Estimate	256	0	0

#### BEDWELLTY.

For the Enlargement of the Union Workhouse.

Welsh	£4,650	0	0
Davies, Cardiff	4,600	0	0
George, Briton Ferry	3,993	0	0
Vaughan, Tredegar	3,979	7	0
Leonard, Tredegar	3,962	0	0
MORGAN, Tredegar (accepted)	3,960	0	0

#### BRIGHTON.

For Completion of Transepts and Side Chapels of St. Joseph's Catholic Church. Mr. JOSEPH S. HANSON, Architect.

Light, Portsmouth	£3,853	0	0
Whittingham, Newport	3,700	0	0
Webber & Walker, Brighton	3,684	0	0
Longley, Crawley	3,628	0	0
Tyerman, Waiworth	3,038	0	0
Goddard & Sons, Dorking	2,994	0	0
R. & E. Evans, Peckham	2,838	0	0



**BIRMINGHAM.**

For Exterior Painting at the Workhouse and Test House.	Workhouse.	Test House.
George . . . . .	£598 0 0	£23 10 0
F. & A. Teall . . . . .	494 10 0	21 10 0
Robinson . . . . .	475 0 0	15 0 0
Bikker (for both) . . . . .	475 0 0	
Horton & Son . . . . .	450 0 0	14 10 0
Nellis . . . . .	440 0 0	43 0 0
Edwards . . . . .	438 3 0	17 3 0
Garratt . . . . .	315 0 0	14 10 0
Totter . . . . .	299 0 0	15 0 0
BRIGGS (accepted) . . . . .	224 10 6	7 5 0

**BLAENAU, FESTINIOG.**

For Erection of New Co-operative Stores.	Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.
Davies . . . . .	£974 0 0
OWEN (accepted) . . . . .	860 0 0
Hughes, Pugh & Hughes . . . . .	824 0 0

For Erection of Manager's House, Oakeley's Quarries. Slate and all stone materials to be provided. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc. HUGHES, PUGH & HUGHES (accepted) . . . . .	£590 0 0
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**BRADFORD.**

For the Furnishing and Decorating of the Bradford Café,  
Market Street, Bradford. Messrs. MILNES & FRANCE,  
Architects.

PRATT & SONS (accepted).

**BROMLEY.**

BROMLEY.	
For Extensions at the Hawthorns, Bromley, Kent, for Mr. R. Jaques. Mr. ST. PIERRE HARRIS, Architect.	
CROSSLEY (accepted)	£149 0 0

For Alterations and Additions to 10 Market Square, Bromley, Kent, for Messrs. Baxter, Payne & Lepper. Mr. ST. PIERRE HARRIS, Architect.		£149 0 0
Balding	.	£225 0 0
Armand	.	168 0 0
Payne	.	161 0 0
Crossley	.	144 0 0
TAYLOR & SON (accepted)	.	120 0 0

**BRYNKIR, CARNARVON.**

BRYNKIR, CARNARVON.			
For Chapel-keeper's House, for the Calvinist Methodist Chapel Trustees. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.			
Jones, Llanwrda	.	.	£248 0 0
J. Williams, Treborth	.	.	233 0 0
Thomas, Llanfyllfai	.	.	210 0 0
C. Roberts, Portmadoc	.	.	209 0 0
R. Williams, Penygroes	.	.	195 0 0
G. ROBERTS, Penygroes (accepted)	.	.	175 0 0

**CARDIFF.**

**CARDIFF.**

For the Erection of Nos. 40 and 41 St. Mary Street, for  
Mr. Thomas Jenkins. Plans and Quantities supplied  
by Mr. J. P. Jones, Cardiff.

D. J. Davis . . . . .	£2,480	0	0
Lewis . . . . .	2,462	0	0
D. Davis . . . . .	2,300	0	0
Price . . . . .	2,280	0	0
SHEPTON ( <i>accepted with modifications</i> ) . . . . .	2,215	0	0

**CARLISLE.**

CARLISLE.			
For Erection of Buildings for Public Baths, &c., Carlisle.			
Mr. J. HEPPWORTH, Assoc. Mem. Inst. C.E., Architect.			
Quantities by Mr. W. B. Dodd, Carlisle.			
Beatty Bros., mason and bricklayer	£1,580	0	0
Batey & Forster, joiner	1,070	0	0
Lowe, concrete	749	2	0
Nanson, slater	209	1	10
Stanfield & Son, ironwork	207	10	0
Kirk & Rooley, painting	192	0	0
Ormerod, plasterer	59	0	0

**COLCHESTER.**

COLCHESTER.				
For Construction of three Groynes, Repairs to Sea-Wall and Forty-seven Groynes, Colchester. Quantities by Engineer.				
Moran	.	.	.	£1,610 0 0
Edmund & Shearl	.	.	.	1,104 0 0

**ELLON.**

ELLON.	
For Alterations at the Steading at Mains of Esslemont, Ellon, Aberdeen.	
<i>Accepted Tenders.</i>	
Burgess, Ellon, carpenter	£68 0 0
Scott, New Pitligo, mason	32 15 0
Fyvie, Ellon, slater and plumber	29 0 0

**FARNBOROUGH.**

FARNBOROUGH.

For Sanitary Works at Starts Hill, Farnborough, Kent, for  
Mr. J. L. Lovibond, Mr. St. PIERRE HARRIS, Sur-  
veyor.

KILLICK, Bromley (*accepted*).

**FAVERSHAM.**

FAVERSHAM.	
For Erection of Class-room and other Works at Board Schools.	
Fuller	£499 0 0
Dawson & Son	429 0 0
Shrubsole	399 0 0
WHIRING BROS. (accepted)	380 0 0
Ratcliff Bros.	329 0 0

**HANLEY.**

HANLEY.	
For Alterations to Shop Premises, in Broad Street, for Mr. George Harrison. Mr. AMBROSE WOOD, Architect. Quantities by the Architect.	
Ward	£100 0 0
Cornes	97 10 0
CORNES (amended) (accepted)	95 0 0

**GRAVESEND.**

For the Erection of a Hospital for Contagious Diseases.		
Rayner	£5,154	0
Naylor	4,620	0
Blake	4,500	0
Avard	4,435	5
Collin & Sons	4,242	0
Gentry	4,135	0
Mortor	4,075	0
Mowlem & Co.	3,990	0
Puny & Co.	3,900	0

**HANWELL.**

For Boundary Walls, Roads, and Drains at St. George's (Hanover Square) Cemetery, Hanwell. Mr. A. J. BOLTON, Architect.	
HANSON BROS., Southall (accepted)	£2,891 0 0

**HOLYHEAD.**

For Erection of Congregational Chapel.	Mr. OWEN
MORRIS ROBERTS, Architect, Portmadoc.	
WILLIAMS, Holyhead (accepted)	£1,310 0 0

**HORBURY.**

For Building a Wesleyan Chapel, Horbury. Mr. WALTER HANSTOCK, A.R.I.B.A., Architect, Horbury. Quantities by the Architect.	
J. & W. BEANLAND, Bradford (accepted)	£2,369 0 0
For mason, joiner, plumber, plasterer, and slater's work.	

**INVERNESS.**

For Building Boundary Wall in the Castle Wynd. Mr. J. A. MACKENZIE, Burgh Surveyor, Inverness.				
Mackenzie	.	.	.	£73 0 0
CAMPBELL (accepted)	.	.	.	42 6 0

**IPSWICH.**

For Enlargement of St. Mary-le-Elms Church. Mr. E. F. BISSOPP, Architect, Ipswich.			
Wyatt	.	.	£1,068 0 0
Coe	.	.	928 10 0
Tooley	.	.	900 0 0
Smith	.	.	875 0 0
Girling	.	.	858 0 0
KENNEY (accepted)	.	.	790 0 0

**LEEDS.**

For Alterations and Additions to Clothing Warehouse,  
Wellington Street, Leeds, for Mr. J. Hepworth. Mr.  
W. S. BRAITHWAITE, Architect, Leeds.  
Irwin & Co., Leeds, joiner, mason, and bricklayer.  
Dawson & Nunnely, Leeds, ironfounder.  
Fox, Leeds, plumber.  
Season, Leeds, slater.  
Coates, Wortley, painter.

**LLITHFAEN.**

For Erection of Baptist Chapel, Llithfaen, Carnarvonshire. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.	
JONES, Penrhos (accepted) . . . . .	£400 0 0

**LONDON.**

LONDON.	
For Additions to No. 11 Park Crescent Mews, Portland Place, for Mr. G. F. Coster. Mr. THOS. DURRANS, Architect.	
Watts . . . . .	£538 2 6
For New Premises, Upper Street, Islington. Mr. HERBERT WINSTANLEY, Architect. Quantities by Mr. W. H. Brayshaw.	
Mortor . . . . .	£1,709 0 0
Roberts . . . . .	1,605 0 0
Boyce . . . . .	1,528 0 0
Brass . . . . .	1,494 0 0
Kilby & Gayford . . . . .	1,411 0 0
WOODWARD (accepted) . . . . .	1,400 0 0

For Construction of about 365 lineal yards of Main Sewer and other Works, in North Woolwich Road, Silver-town, for the West Ham Local Board. Mr. LEWIS ANGELL, C.E., Engineer.			
Mowlem & Co.	.	.	£1,105 0 0
Strachan	.	.	1,080 0 0
Jackson	.	.	890 0 0
J. W. & J. NEAVES (accepted)	.	.	869 10 0
Brightmore	.	.	867 0 0

For Alterations at No. 40 Finsbury Pavement, for the Sceptre Life Association, Mr. J. M. CABLE, Architect.			
Higgs	.	.	£1,400 0 0
Sharpe	.	.	1,380 0 0
Richardson Bros.	.	.	1,337 0 0
Holloway Bros.	.	.	1,286 0 0
CRASKE (accepted)	.	.	1,269 0 0

For Additional Vestry, Corridors, &c., to St. Mark's Church, Walworth, for the Rev. R. R. Resker. Mr. C. N. McINTYRE NORTH, Architect, 15 Borough, S.E.			
Josolyne	.	.	£355 0 0
Richardson Bros.	.	.	338 0 0
Marsland	.	.	313 0 0
Babbs	.	.	297 0 0

For Alterations and Additions to No. 23 St. John's Wood Road, for Dr. Hickman. Mr. THOS. DURRANS, Architect.				
Stevenson	.	.	.	£775 0 0
Howard	.	.	.	659 0 0
Bodimade	.	.	.	537 0 0
WRIGHT (accepted)	.	.	.	497 0 0

**Plumbing Works.**

Hume . . . . .	81 0 0
Moncrieffe . . . . .	73 0 0

**LONDON—continued.**

For Sundry Works to be executed at No. 45 Rutland Gate, W., for Madame de Falbé. Mr. T. S. ARCHEA, M.R.I.B.A., Architect.	
CARTER (accepted) . . . . .	£250 0 0
For Alterations to No. 11, King Street, Portman Square, for Mr. Williams. Mr. THOS. DURRANS, Architect.	
Bolding . . . . .	£580 0 0
Stevenson . . . . .	525 0 0
Edgar . . . . .	525 0 0
Howard . . . . .	521 0 0
BUTCHER (accepted) . . . . .	498 0 0

For Erection of Stables and Residential Chambers in Trafalgar Square, Brompton. Mr. C. H. THOMAS, Architect. Quantities by Messrs. Argent & Wood- ward.			
Higgs & Hill	.	.	£3,600 0 0
Lawrence	.	.	3,589 0 0
Green	.	.	3,575 0 0
Smith	.	.	3,479 0 0
Kearley	.	.	3,347 0 0
Brass	.	.	3,300 0 0
Bell	.	.	3,275 0 0
Stimpson & Co.	.	.	3,268 0 0
Lea	.	.	3,146 0 0
Scharien & Williams	.	.	3,000 0 0

For proposed Warehouse in Paternoster Square, E.C. Mr. R. E. TAYLOR, Architect. Quantities by Mr. W. Barnett.		
Thompson & Tweed	£2,542	10 0
Holt	2,210	0 0
Jerrard	2,197	0 0
Green	2,185	0 0
Langmead & Way	2,130	0 0
Gould & Brand	2,093	0 0
Scott	2,075	0 0
Hunt	1,988	0 0
Scharien & Williams	1,978	0 0
Cadman and Bundy	1,970	0 0
Salt	1,928	0 0
Phillips	1,920	0 0
Harper	1,877	0 0
Battley	1,869	0 0
BUNCH & MOOR (accepted)	1,817	0 0

For Rebuilding last Section of the Royal York Turkish and Electric Baths, York Terrace, Regent's Park, for Dr. Jagielski, M.D. Mr. THOS. DURRANS, Architect, 44 Upper Baker Street, N.W.			
Collier & Co. . . . .		£2,983	0 0
Stevenson . . . . .		2,790	0 0
Blyth . . . . .		2,725	0 0
Birch . . . . .		2,650	0 0
Lea & Son . . . . .		2,424	0 0
HOWARD (accepted) . . . . .		2,050	0 0

**Engineering Works.**

Jeakes & Co. . . . .	844 0 0
Whitehead & Co. . . . .	519 0 0
WILDMAN (accepted) . . . . .	487 0 0

**Fibrous Plaster Ceiling.**

Battiscombe & Harris . . . . .	135 0 0
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**Gas Engineer.**

Hockey . . . . .	65 10 0
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**LOWESTOFT.**

For Making-up East and West Raglan Streets.		
Cook, Bennett & Thew	£599	2 6
Yallop	574	4 9
CHURCH (accepted)	506	0 0

**MANSFIELD.**

MANFIELD.		
For the Erection of a New Methodist Free Church, Mansfield Woodhouse. Mr. ARTHUR MARSHALL, A.R.I.B.A., Architect, Nottingham.		
Alsop, Mansfield . . . . .	£820	0 0
Redwood, Sutton . . . . .	763	0 0
STEVENSON, Woodhouse (accepted) . . . . .	720	0 0

For Erection of Villa Residence, Stables, Coach-house, Walling, &c., Mansfield. Mr. ARTHUR MARSHALL, A.R.I.B.A., Architect, Nottingham. Quantities by the Architect.		
Vickers, Nottingham . . . . .	£2,738	0 0
Crawshaw, Skegness . . . . .	2,450	0 0
Hewitt, Leicester . . . . .	2,360	0 0
Frisby, Mansfield . . . . .	2,295	0 0
Greenwood, Mansfield . . . . .	2,228	0 0
Dudson & Parrish, Nottingham . . . . .	2,183	0 0
Eastwood, Warsop . . . . .	2,178	0 0

**Amended Tenders.**

Greenwood . . . . .	2,304 0 0
Eastwood . . . . .	2,304 0 0
DUDSON & PARRISH (accepted) . . . . .	2,291 0 0

**MEANWOOD (LEEDS).**

For Timber Studio for Mr. A. T. Watmough.	Mr. JAMES
WILSON, Architect, 12 East Parade, Leeds.	
BECK (accepted).	

**ORPINGTON.**

For Stables, Greenhouse and Decorations at Mada, Starts Hill, Orpington. Mr. ST. PIERRE HARRIS, Architect.	
Wood	£319 0 0
TAYLOR & SON (accepted)	288 10 0

For Repairs and Alterations to Stables and Cottage at Tubbendens, Orpington. Mr. ST. PIERRE HARRIS, Architect.	
WRIGHT (accepted) . . . . .	£135 0 0

For Decorations and Repairs to Northholm, Orpington, for Mr. J. Brooks. Mr. ST. PIERRE HARRIS, Architect and Surveyor.
TAYLOR (accepted) . . . . .



## POOLE.

For the Erection of Public Baths.

	Double Baths.	Single Baths.
James Dunford . . .	£800 0 0	£500 0 0
Johns & Guy . . .	761 10 0	539 0 0
John Dunford . . .	760 0 0	540 0 0
Curtis . . .	752 0 0	520 0 0
Rigler & Crane . . .	722 0 0	558 0 0
Pearey . . .	707 0 0	503 0 0
HADGOOD (accepted) . . .	700 0 0	545 0 0
Surveyor's Estimate . . .	740 0 0	530 0 0

## PORTMADOC.

For Additions and Alteration of the Dwelling-house and Building new Surgery, for Mr. Samuel Griffith, M.D., J.P. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.

Lloyd, Portmadoc . . .	£498 0 0
Roberts, Criccieth . . .	477 0 0
JONES, Portmadoc (accepted) . . .	467 0 0

For Additions to Bellevue. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.

ROBERTS (accepted) . . .	£228 0 0
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## ROCHDALE.

For Erection of Free Public Library, for the Corporation. Mr. S. S. PLATT (Borough Surveyor), Architect.

BERRY, Rochdale (accepted) . . .	£3,800 0 0
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\* Not including Foundations and Heating.

## SANGHAR (SCOTLAND).

For the Mason, Joiner, and other Works at Sanghar Board School.

Hair, Sanghar, mason . . .	£662 0 0
Gilmour & Co., Sanghar, joiner . . .	471 12 0
Wilson, Sanghar, slater and plumber . . .	192 0 3
Tweedie, Annan, plasterer . . .	68 0 0
Robertson & Sons, Kilmarnock, painter and glazier . . .	37 19 0

## ST. ALBANS.

For Building Two Small Villa Residences, St. Albans, for Messrs. H. Rose &amp; Son.

Eberidge . . .	£749 9 0
Sparrow . . .	748 0 0
Mead . . .	686 0 0
Austen . . .	634 0 0
J. & W. SAVAGE (accepted) . . .	609 10 0

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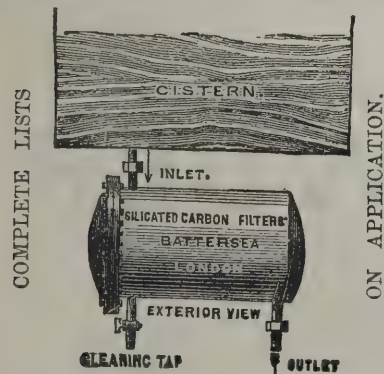
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## SURBITON.

For Sewers and Surface-water Drain, for the Surbiton Improvement Commission. Mr. S. MATHER, C.E., Surveyor.

	Sewers.	Surface Water.
Pound . . .	£7,955 0 0	£1,783 0 0
Hayter . . .	6,243 0 0	1,161 0 0
Botterill . . .	6,168 0 0	1,632 0 0
Neave Bros. . .	5,961 0 0	1,286 0 0
Wilkes & Co. . .	5,553 16 11	1,124 1 5
Cowdery & Sons . . .	5,417 12 7	1,182 6 8
Cardus . . .	5,360 0 0	1,328 0 0
E. & W. Iles . . .	4,943 0 0	1,111 0 0
Adams . . .	4,846 0 0	1,357 0 0
Hill Bros. . .	4,842 6 9	1,147 15 9
Dickson . . .	4,600 0 0	800 0 0
Rigby . . .	4,536 4 3	961 5 8
Marshall . . .	4,529 19 6	1,263 5 6
BEADLE BROS., Erith . . .	4,338 0 0	772 0 0
(accepted) . . .	4,250 0 0	1,005 10 0
Rayner . . .		

## TALYSARN.

For Erection of Baptist Chapel, Talysarn, near Carnarvon. Mr. OWEN MORRIS ROBERTS, Architect, Portmadoc.

Thomas & Davies, Carnarvon . . .	£1,475 0 0
W. Jones, Portmadoc . . .	1,340 0 0
Morris, Llanllyfiri . . .	1,297 0 0
E. Jones, Grescoen . . .	1,238 0 0
Hughes, Liverpool . . .	1,219 0 0
Roberts, Penygroes . . .	1,200 0 0
D. Jones, Llanwrda . . .	1,138 0 0
G. Jones, Morfa Nevin . . .	1,130 0 0
Williams, Penygroes . . .	1,115 0 0
J. & G. Pritchard, Penygroes . . .	1,110 0 0
H. Jones, Cwmyglo . . .	1,107 0 0
R. Jones, Tyddyndu (accepted) . . .	1,100 0 0
R. Jones, Bangor . . .	1,095 0 0
Evans, Port Dinorwic . . .	1,055 10 0

## WELLINGTON.

For a new Thirty-quarter Malting, for Mr. John G. Wackrill. Messrs. DAVISON, INSKIPP &amp; MACKENZIE, Architects, 62 Leadenhall Street, London. Quantities by Messrs. Curtis &amp; Sons.

Roper . . .	£1,305 9 5
Darlington . . .	1,270 0 0
Jones . . .	1,252 10 9
Millington . . .	1,250 0 0
Paterson & Son . . .	1,198 17 0
Treasure & Sons . . .	1,133 0 0
T. & G. S. Groves . . .	1,130 0 0
Yates . . .	1,100 0 0

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## TIVERTON.

For Building Detached Villa on the St. Anbryn's Estate, Tiverton, for Mr. W. W. Martin. Mr. JOHN WATSON, Architect.

Petherick Bros., Plymouth . . .	£1,474 0 0
Vanstone & Mumford, Torquay . . .	1,339 0 0
Pyle & Grater, Tiverton . . .	1,190 0 0

## WELLINGBOROUGH.

For Building new Offices for the Wellingborough Brick and Tile Company.

Harrison . . .	£80 0 0
Underwood . . .	69 0 0
MARRIOTT (accepted) . . .	65 0 0
Morris (not complete) . . .	64 13 0

## WESTON-SUPER-MARE.

For Completion of Hospital Buildings. Messrs. HANS PRICE &amp; WOOLER, Architects.

Church, Bristol . . .	£1,665 0 0
Davis, Bristol . . .	1,533 0 0
Palmer . . .	1,487 0 0
Willcox, Clevedon . . .	1,353 11 1
Forse, Bristol . . .	1,300 0 0
Beavan, Bristol . . .	1,264 0 0
Willcox . . .	1,246 0 0

## Plumber's Work.

Thomas . . .	£225 0 0
Gill . . .	222 12 0
Perry . . .	189 0 0

## Heating Apparatus.

Bacon . . .	231 0 0
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## WING, RUTLAND.

For Partially Repairing and Re-seating the Parish Church. Mr. G. VIALIS, Architect, London.

## With Pitch Pine Seats.

John Woolston, Stamford . . .	£810 9 0
Wade, St. Neot's . . .	498 0 0
Bardell Bros., Lynn . . .	483 0 0
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# The Architect.

## APROPOS OF THE WELLINGTON STATUE.



**M**R. SHAW-LEFEVRE is said to have issued the official *fiat* by this time for the demolition, without more debate, of the unfortunate colossus which was intended to do so much honour, and was found to do so little, to the great Duke of WELLINGTON. The metal is to be used for another statue of the Duke, which is to be placed on what is virtually the same site, but with a less degree of ambitious artistic motive, and, it is to be hoped, a greater degree of ordinary artistic success.

It is part of the price we pay for our constitutionalism that this resolution of the First Commissioner of Works, although unmistakably approved, indeed inspired, by the opinion of Parliament and the public at large, is still regarded here and there as an outrage to propriety. An offer, it is reported, has been actually made by some despairing malcontents to purchase the unhappy sculpture with money, in order to save it, as they think, from desecration. Even such "friends of the Duke" as would scarcely care to go so far as this commercially have been no less active on moral grounds, pleading almost piteously for the preservation of the "portrait" of the hero, and the "portrait of his horse Copenhagen," for the sake of that good taste in loyalty which no doubt, when really in question, may be acknowledged to be of more value to most of us than all the good taste in art can ever pretend to be. But the plain English of the matter is easily understood. The Duke, when he was alive, although not at all responsible for the statue itself as a work of art, took upon himself the whole responsibility of insisting upon its being allowed to occupy the peculiar pedestal which had been assigned to it. His reasons of course were not artistic, but they were, as he thought, far better and more forcible, because more military. But, now the Duke is dead, his reasons are differently regarded; or rather, the public opinion which went against his reasons seven-and-thirty years ago goes against them still, while the respectable, but very small, minority of more or less military persons who upheld them then successfully uphold them now to no effect. Considerations of artistic common sense, to put the case on no higher ground, have at length asserted themselves quietly and respectfully, but very firmly. The statue was a frightful blunder, and is to be so acknowledged and dealt with. It was a discredit, not to say a disgrace, to English art, and as such is to be abolished. To break it up for old bronze is no dishonour to the memory of the great commander; on the contrary, it is felt that to perpetuate such a *fiasco*, even as a curiosity—one cannot say as a historical object—would be a positive dishonour to both the past and the present. So another statue is to be substituted at the national expense; and, with what is hoped to be vastly better art, it shall at least be fabricated with the self-same metal.

One of the first reflections that will arise in the minds of some whose opinions must have great weight upon such a question, is why the new statue should not be so far like the old as to be on the same scale. As a colossal equestrian figuré, unique in England, the old statue, in spite of its inartistic character, and its almost still more inartistic disposition—in spite, let us plainly say, of its complete vulgarity—was always regarded as a great sight, one which every visitor to London must go and see. Even when compared with the colossal *ACHILLES*, which watched over the back of the Duke's house while the other colossus stood on guard at the front, this prodigious portrait figure had all the advantage in the eyes of that good-natured majority of the people whom after all it is in such cases always well to conciliate. Why, then, should they be now deprived of the enjoyment of the heroic bulk of the sculpture? The bronze is in quantity enough to make a statue on the same grand scale, and it seems a pity indeed that the memorial, once so imposing in size, should be brought down to a common level for no reason at all that has been named. Is it considered to be settled that

Englishmen are unequal to the design of a heroic figure? This is the only reason we can imagine to have any force, but we cannot believe that such an idea has really taken possession of the official mind.

This new enterprise has started again in the press, as could only have been expected, the well-worn sarcasms with which our monumental statues are customarily assailed whenever an occasion offers. Perhaps there is nothing in the whole range of the newspaper criticism of the fine arts in England which more effectually shows its too frequent futility, than the indiscriminating discredit awarded to the works of monumental sculpture which have been set up in the streets of the metropolis. No one who has an artistic eye in his head can deny that some of those statues are more or less badly modelled; but it is equally true that the great majority of them are, to say the least, of very fair merit, while some would be worthy of a site in any town in Europe. Take, for instance, the single neighbourhood of Trafalgar Square. It is one of the affectations of the kind of criticism we are speaking of to point to the King *CHARLES* at Charing Cross as absolutely the only thing worth looking at. Now we will take leave to acknowledge that the *NAPIER* is an exceedingly unfortunate specimen, and the *HAVELOCK* little better; but there are worse things abroad than the *GEORGE III.* in Cockspur Street, and the stirrupless *GEORGE IV.* As another instance, what are we to say of the criticism which ridicules at Waterloo Place the Guards' Monument, and sanctions the Lord *LAWRENCE*? One of the most urgent of all *desiderata* in journalism just now is that kind of criticism—to be administered of course by true critics—which shall point out by name, if not the bad, at least the good examples of such art that are before the public eye, and which, instead of meeting every new proposal with the same facile sneer, shall guide public opinion to a right conclusion by skilful illustration derived from the many instances of recognised merit. If, amongst all the productions of art, a statue is the most easily ridiculed, that is because it is the least easily understood.

We venture especially to hope that in the present case some one may be consulted who will be able to guide the authorities aright in difficult circumstances. For it is useless to proceed to set up another monument to the Duke of WELLINGTON unless it is to be worthy of the highest esteem on other grounds than the personal reverence which must now be regarded in a great measure as the impulse of a past generation. Especially if it is to occupy the position which is proposed, at the central point of the recently-formed area between the parks, ought it to be a work worthy in these days of such prominence.

But there are many who would wish to see the statue placed elsewhere. Apsley House is not what it was. The advance of building art has left it a long way behind; the few sightseers who care to look at it are inclined to think it a poor thing; it looks like a house that before very long will be "improved away" altogether and scarcely missed.

There is one suggestion which, whether it may be thought worth making or not on higher ground, ought perhaps to be submitted to the public, if only for the purpose of directing attention to that most singular shortcoming in respect of our public statuary—the vacant pedestal in Trafalgar Square. The naval conqueror of the great war has a most noble monument there; the royal master is also very fairly represented; why not let the military leader complete the group? If we have a sculptor capable of matching the horse and rider of *CHANTREY*, he need never complain of such a site as this; and we are much mistaken if there are not many persons who would regard with much more favour the erection of a statue to WELLINGTON in the great central *place* of the town than the restoration of a memorial which, in very questionable taste, they say, was put up in front of the old soldier's windows, and came deservedly to grief.

Another way in which the vacant pedestal might be occupied in honour is perhaps worthy of being referred to; for sooner or later occupied it must certainly be. That the father of Queen *VICTORIA* might fairly claim such a distinction everyone will surely acknowledge. If it were only in memory of two bright princesses, on whom, each in her day, the hopes of the nation were so fondly set—one destined to pass away in her early youth, and the other to be through a long life the most popular sovereign in all the world—the statues of the brothers *GEORGE*, Prince of WALES, and *EDWARD*, Duke of KENT, thus associated, would be objects of some interest for ages to



come. We say nothing of the personal compliment to HER MAJESTY, which might surely have been offered long ago.

### CIRCULAR NOTES FROM FRANCONIA.

[BY A CORRESPONDENT.]

NO country lends itself better to the planning of small tours than Germany. The history of the people, the conformation of the land, subdivide the country into districts which retain distinctive features of climate and scenery, and of race and customs that even to the present time have withstood the levelling influences of modern political and commercial progress, and keep up invisibly the boundary lines which have been erased from the school map of the day. One such district is that part of Upper Bavaria to which still clings in local appellation the name of Franken, or, as we call it, Franconia. Within Franconia the citizen life, which was so active an energy in national progress during the fifteenth and sixteenth centuries, came to full flower in the industrial towns, with Nürnberg and Augsburg at their head, left its impress on all the arts of use and ornament, and may be said to have created a style of domestic architecture. Along the valley of the Main a dominant and splendid ecclesiastical aristocracy set palace-like convents upon the hillsides, flourished under prince-bishops in the stately towns of Bamberg and Würzburg, and did its utmost to quench the sturdy spirit of the burghers. It is notable of the character of these Franconian folk that the reformed doctrine early won acceptance with them. It represented freedom and resistance, and the Franconians were always struggling for their rights, whether against imperial, princely, or ecclesiastical oppression. The traveller throughout this district cannot fail to mark that a certain independence and sturdiness continue to characterise the people. Franconians are well-looking, alert, and eminently assiduous; they develop their industries without ostentation or empty speculation; they cultivate the land till it smiles with fertility, and deserves its time-honoured title of a "friendly land," as they are themselves certainly a friendly people.

The circular note which entitles our letters starts from Frankfurt-am-Main, drops down from Würzburg to Nürnberg, crosses the "Franconian Switzerland" to Baireuth, turns round to Bamberg, and loops itself to Würzburg again. The line from Frankfurt to Würzburg is most attractive, especially in the later summer months, when the woods are in their full beauty, and the harvest fields and pastures ready for the sickle and wain. After passing Aschaffenburg, the route ascends into the high regions of the Spessart, a range of lofty granite and slate hills, thickly planted with pine and fir, and the original growth of beech wood, fine in form and intersected by deep valleys, where hamlets of old red-tiled and timbered houses picturesquely cluster on the slopes or in the meadows about their churches, little deep-toned, towered buildings, or often hardly more than a big cottage, with a tiny bell-steeple and deep roof. Clear streams of irrigation thread the bright green pastures with silver streaks, and trees of softer foliage enrich the more sombre colouring of the fir plantations. On the eastern side the hills break graciously down, and at a convergence of their wooded shoulders towards a curve of the brimming river Main the charming little town of Lohr lifts its church towers and high-gabled ruddy houses against the forest background. The Main valley hereabouts is full of attraction for artists and anglers. In July and August the people are out in their picturesque costume at work in the harvest fields, grass pastures, and various crops; the women in scarlet bodices with white sleeves, and scarlet kerchiefs folded on their heads, stand and stoop with their reaping-hooks amidst the golden corn, or carry big bundles of green stuff on their heads; and the men, in the ever-harmonious blue blouse, guide the long pole waggons drawn by oxen. Fishing stations are scattered along the shining stream at irregular intervals; here and there a ruined castle on the hills frowns down into the valley, with remembrance of less peaceful days; or a little town with remnant of old wall and tower, such as the quaint Gmünden on the tributary Saale, juts forward under the shelter of a cliff. Side valleys open up into the hills on either side, and tempt the pedestrian to explore them, and the artist, with sketch-book in hand, finds constant material for pictorial notes, and a most delightful wandering ground.

Würzburg, although finely placed about and above the Main, and with its many church towers and commanding citadel on the Marienberg, once the fortified residence of the truculent prince-bishops, imposing from the approach on the Frankfurt side, is rather a disappointing town. The narrow, quaint streets, of which old guide-books speak, are pretty much things of the past; the great Platz gapes like the squares at Darmstadt, with too much space for the scale of the surrounding buildings. Renovation is busy with the ancient monuments, and travellers who have known the town in past days will tremble to hear of restoration and demolition. At the side of the Neue Münster Church, the ancient origin of which can now only be traced in the Romanesque crypt, where St. KILIAN, the Irish missionary and apostle of Franconia, lies re-buried under a painted altar—the original stone sarcophagus being kept, however, a few yards off—an enterprising tradesman has purchased a piece of land whereon to erect himself a big house opposite his shop; some old buildings have come down, and an interesting piece of cloister arcade in red sandstone is laid bare. This is to be preserved, but moved nearer the church; meantime it has been photographed. The date is early in the thirteenth century. There is a double row of pretty pillars, and some curious small memorial reliefs of figures, mottoes, and medallions. Among these is a portrait of WALTHER VON DER VOGELWEIDE, the Minnesinger, who was buried in the cloisters, with his name and "Spruch," or verse, barely decipherable now.

The lovely Gothic Marien-Kapelle (1377-1479), on the market-place, is being patched with red sandstone, which, as it keeps its colour, will ever give a harlequin appearance to the rich exterior. One tower has been at a previous period erected in the same ruddy material, and looks odd enough. The excuse for this motley mending is that the original dark-coloured stone was too friable to bear the weather. This presumably is the reason why the entire interior, with its slender shafts, light vaulting, elegant lancets, and canopied statues on every pier, is painted all over with an oily pale buff, picked out with gilding, and, in the case of the sculpture, adorned with polychrome. This treatment, together with the tasteless church furniture, does much towards spoiling a design which, in its lofty airy proportions and delicate members, reminds one of the Sainte-Chapelle. The exterior is rich with crocket, canopy, and sculptured figures, amongst which episcopal saints figure largely. The reliefs on the tympanum of the portals are particularly quaint in conception, but have little of the noble energy which marks French sculpture of the same period, being rather chiefly notable for homely but ready invention. The *Last Judgment* over the western door shows CHRIST seated with hands held palm outwards; from His mouth proceed two swords. An angel holds a crown like a cushion over his head; two others float on either side, one bearing the cross, the other the spear and scourge; the MADONNA and St. JOHN BAPTIST below respectively kneel in supplication with folded hands, St. JOHN, if it be he, clothed in flowing drapery with hair smoothly parted; four tiny figures half risen from rocks or coffins, and two angels sounding the resurrection trumps, fill up the interspaces. Below, again, the body religious and episcopal receive favourable treatment, inasmuch as no less than two mitred figures, a monk and two nuns, are, out of a group of nine, allowed smiling full grin to enter the gate of Heaven, built like a Gothic porch, while some villainous-looking fellows in tall caps of a lay description are triumphantly pulled along with a chain by a devil the other side. Underneath, a confusion of little heads and plank-like objects reveals itself on close inspection as the dead struggling with their coffin-lids, the artist's object being apparently to leave no space unfilled.

The figures are by no means without expressive action, but all of a homely kind; the draperies are cast rather after the character of metal-work, which is a characteristic of early German sculpture. On the north side a relief of *The Annunciation* shows the same grotesque invention. Above sits the Deity, and from his mouth the Spirit descends in a stream, which enters at the back of the Virgin's head, while the angel GABRIEL is expressing the glad import of his message with a joyful grimace that is most comic. The sculpture in this chapel is throughout of a lower school than the architectural design or purely decorative work, and is certainly much inferior to work of an earlier date in the neighbouring cathedral city of Bamberg.

The Domkirche of Würzburg is a transmuted edifice of early foundation, built to commemorate the place of martyrdom



of St. KILIAN, and showing some remnant of Romanesque style on the exterior. The interior is imposing, in spite of horrible trumpery in the way of modern decoration, by reason of its magnificent series of memorial effigies. On every pier of the nave, between the bays and on most of the returns, are the life-size figures, in high, almost round relief, of the long array of bishops who have borne not only spiritual but temporal rule over Würzburg, from GOTTFRIED I. of Pisenburg (1190) down to the round-faced, rather sheepish-looking prelate who departed in 1840. Nearly all of these effigies are full length, and in chief instances the most remarkable memorials of the kind in Germany. The material varies from the rough red stone, used so much in this district, to marble and alabaster. The early monument of Bishop GOTTFRIED is impressive by its simplicity; he wears stole, maniples and gloves, and a simple three-cornered cap like one often now used by priests; holds his plain curved episcopal staff in right hand, clasps the Gospel book with the left, and looks out of his coffin-like enclosure with a grave, resolute aspect—a long-nosed face, with large eyes and a full, straight mouth, with close-cut moustache and beard. In contrast to this rough but dignified and emphatic figure is the remarkable and highly-wrought monument of RUDOLF II. VON SCHERENBERG (died in 1495), the most striking of several works by the famous RIEMENSCHNEIDER. This represents an old man of ninety-two, toothless, with skin worn to parchment over the handsome, straight, delicate nose and stern curved brows; a remarkable physiognomy, full of pride and energy; the ruling passion strong in the almost death-stricken lineaments. There is no mistaking the character; the bishop is not only a prince, but a man of war, reluctant to depart the battle-field of life, and still clutching both crozier and sword—the sword, be it noted, held in the right hand. The pomp of office enriches the jewelled mitre, embroidered vestments, and gloves. The crozier is a miracle of rich Gothic convolutions; angels with crumpled draperies and full wigs uphold armorial bearings and support a tablet containing the titles and virtues of the deceased, while heraldic lions on either side do duty with two more of the six escutcheons necessary to the complement of the bishop's family emblazonments. A rich Gothic canopy completes the *ensemble* of this remarkable monument, which is, of course, in no commoner material than marble. Several other of these effigies deserve like close description, some having extremely curious background detail, descriptive of events in the history of the prelate represented, or accessory figures of interest in type and costume; but, on the whole, this *chef-d'œuvre* by RIEMENSCHNEIDER is the most notable for portraiture of a striking kind and for artistic treatment. One or two of the monuments have been removed into the church from the walls of a side crypt chapel, the floor of which is literally paved with memorial slabs, whose sculptured reliefs are worn down by the feet of irreverent centuries.

Among other objects of interest in the Dom are the very beautiful beaten iron gates of the choir, work of a local artist within the century, and worthy of old German traditions. But from an antiquarian point, the treasure of the interior is the old bronze font by ECKHARD, of Worms, date 1279, shaped like a tub, with buttresses headed by early Gothic pinnacles, and arcaded on the side and frame in quaint high reliefs from the life of CHRIST. The figures are stumpy and broad-headed, with thin extremities, but have considerable energy and character. The details are grotesque, and the treatment is archaic in a rude conventionalism. The Virgin in the Nativity lies on a cushioned couch, and has the Infant in minute scale placed on a sort of shelf above her, with the heads of two oxen projecting over it, as much as to say, "This is a manger," while JOSEPH, crowned with quite a regal night-cap, sleeps leaning on his staff, and sitting on a box inscribed with the text. A similar box serves as pedestal for the angel who superintends the baptism of CHRIST by St. JOHN, wherein, with a naïve disregard of natural laws, the coils which represent the water in which CHRIST is immersed to the waist, are very much higher than the shore on which the Baptist stands. The whole work is interesting from its transitional character, and the bold treatment of high relief. The draperies are long and rigid in cast, neither so flowing as early Romanesque work, with its Classic traditions, nor so free and fantastic as later Gothic.

The sights of Würzburg are for the rest sufficiently noted in MURRAY'S Guide (BAEDEKER'S is very scant of record). The citadel, with old structures in the chapel and elsewhere; the stately bridge, with its statues of bishops on the pier parapets;

the palace built by two bishops of the SCHÖNBORN family, who by the way, have a chapel to themselves in the Dom, full of bad taste and rich material; the great hospital founded by JULIUS ECHTLER, in 1572, one of the best episcopal rulers of the list; and the pleasant gardens on the glacis, or line of the old fortifications, two-thirds round the town. Altogether, with its fine situation, wide river, university, pretty villa residences and pleasant streets, lovely neighbourhood and good market, Würzburg is not at all a bad place for residence, independently of its stirring history and remains of artistic and antiquarian interest.

#### BOROUGH SURVEYORS.\*

THE position of a borough surveyor is somewhat anomalous. His office is of recent creation; his masters are men who, as a rule, are incompetent to understand his duties; his salary is inadequate to his responsibilities, and his tenure of office may depend upon the whims of a few agitators. On the other hand, his knowledge must be almost unlimited, far exceeding that of the architect according to the Vitruvian standard. He may have to undertake, as an engineer, sewerage and sewage utilisation works, water and gas works, canals, docks, harbour improvements, river navigation, the protection of coasts against encroachments of the sea, the prevention of floods by rivers, the construction and maintenance of roads, bridges, and tramways; as an architect he may have to design and superintend the erection of lunatic asylums, municipal offices, hospitals, abattoirs, mortuaries, baths, wash-houses, cemetery chapels, stables, police stations, and other similar works; if there are recreation-grounds, public parks, or cemeteries, he is expected to be a landscape gardener; all kinds of surveying, quantities, estimates, valuation of property, measuring land, laying out streets, are considered to be mere trifles for him, and, like the examination of accounts, to be undertaken in spare moments. Difficult as those subjects may be, they are easy of attainment compared with the diplomacy which is requisite to enable the surveyor to go through council and committee meetings. Many a borough engineer would rather prefer to spend his day in laying out drains than in attending the council chamber. Contractors and navvies are often exasperating, but for taking the life out of a man they are not equal to the guardians of the public interests that are to be found on every local board. Yet, in spite of the difficulties and risks attending the office, every advertisement for a borough surveyor attracts an immensity of candidates—it is supposed that the number of them corresponds with the number of pounds sterling in the salary. It is possible that the peculiarities of the office have attractions for some minds, and that young men of combative tendencies anticipate pleasure in the "scenes" in which the surveyor has to participate, and a good deal of the delight of battle may be found in overcoming the pretensions of obstreperous rate-payers.

Mr. BOULNOIS is one of the borough engineers who have successfully held their position, and he inspired so much respect for his courage, efficiency, and impartiality that the good people of Exeter—many of whom may have at one time regarded him as an enemy—actually presented him with pieces of plate and other substantial memorials on his departure from among them. A man who has been so victorious is well fitted to give advice to aspirants. If Mr. BOULNOIS was successful, it was owing to the fact that he knew his business and practised it fearlessly. He, therefore, gives in his book suggestions which relate to conduct as well as those which refer to technical matters. Thus, for example, punctuality in attending committees is enjoined, among other reasons, because "the gentlemen who form municipal bodies give their time gratuitously, and everything should be done to save it as much as possible," a sentence which indicates that Mr. BOULNOIS has acquired "the art of putting things," and it is one which is indispensable to an officer who has to deal with opposing interests.

The construction and maintenance of streets form an important part of the surveyor's duties, and Mr. BOULNOIS devotes several chapters to materials, forming, rolling, pitching, kerbing, channeling, &c. In them we find the results of his own experience, as well as the recorded results of other engineers in England and elsewhere, and the advantages and

\* *The Municipal and Sanitary Engineer's Handbook.* By H. Percy Boulnois, C.E. E. & F. N. Spon.



defects of various systems are stated fairly and clearly. Everything is considered, from machine stone-breakers and steam rollers to hammers and brooms. Specimens of specifications for the construction and repairs of roads are given. It is needless to say that the information will be useful to many who are not town surveyors, and such suggestions as those on concrete and tar pavements will be often applicable in covering the surfaces of yards and enclosures.

The model by-laws of the Local Government Board are made the subject of a chapter. The ambiguities of phrases in the clauses are discussed. Thus, for example, "new building" is sometimes defined by the aid of the Public Health Act, in which there is an equal difficulty as respects ground floor. When it said that "the re-erecting of any building pulled down to, or below the ground floor, or of any frame building of which only the framework is left down to the ground floor, &c., shall be considered the erection of a new building," Mr. BOULNOIS asks whether the words mean the actual floor level, or the cubical space contained by the walls, floor, and ceiling of the ground floor or ground storey of the building? The uncertainty has given rise to some sharp practice, so as to make the local authority powerless when old buildings are transformed into new ones. The following is one of the dodges: "Sometimes a so-called repair of a building is commenced by adding a new roof, perhaps, at a higher level than the old one; when sufficient time has elapsed to allay suspicion a new front is erected, and then new back and side walls in due course, the alteration of the interior floors not attracting much attention." Mr. BOULNOIS doubts whether it is possible to prosecute when an old building is gradually converted into a new one, as the complaint has to be made according to the Public Health Act within six months from the time when the matter of the complaint arose. The complaint could not be made when the work was first commenced, as no offence would have been committed, and if made after the work was finished, it might be urged that the offence was commenced more than six months prior. Mr. BOULNOIS says that it is possible in towns for a man to convert stables and warehouses into dwelling-houses, although they may not be adapted for that purpose. He has simply to get some one to prove that they were originally constructed for human habitation, and the Public Health Act, through the unwisdom of the 159th section, becomes an instrument for creating what may be a source of danger.

Mr. BOULNOIS has to admit the inefficiency of the inspection that is now practised in towns. It is impossible for a surveyor, having a multitude of other duties engrossing his attention, and who in some places is without an assistant, to properly examine houses while in course of construction. The by-laws are so stringent that even a honest builder may be forced to evade them. In one respect they are modelled on the Metropolitan Building Act, and sacrifice much to prevent the spread of fire. Mr. BOULNOIS is of opinion that fires chiefly affect insurance companies. He would have every one pay an insurance premium, and let the companies look after their own interests. Life ought to be of as much interest as property, "yet no clause can be discovered in the model by-laws rendering it compulsory to make some provision in dwelling-houses or factories for the easy escape of the inmates in case of fire." Mr. BOULNOIS also is sceptical about the advantages of the large open space at the back and sides of a small house. He has found the space turned into a receptacle for garbage and filth, thus becoming a source of disease to the neighbourhood.

There are many other chapters in Mr. BOULNOIS' book which we should have liked to notice if space were available. It is full of information, is arranged in the way that is best adapted for reference, and is entitled to become a borough surveyor's *vade mecum*.

## PARIS NOTES.

THE Prefect of the Seine has nominated the following gentlemen to be members of the City Managing Committee of Fine Arts: M. Lavastre, in the painting section; M. Falquière, in the sculpture section; M. Ballu, in the architectural section; and M. Chaplain, in the engraving section.

Eugène Delacroix's painting of *The Entry of the Crusaders into Constantinople*, now in the Versailles Museum, is shortly to be brought to the Louvre, where it will hang in the new representative gallery referred to in *The Architect* of last week. This fine work was first exhibited at the 1841 Salon, and reappeared at the 1855 Universal Exhibition. In order to fill the vacant place at Versailles, the Minister of Fine Arts about twelve months ago commissioned M. Charles de Serres to make a copy of it. This is now finished, and will be hung immediately the original is removed.

The City of Paris has purchased from the contractors for the demolition of the Tuileries a large sculptured frieze and two fluted pilasters inlaid with marble, and dating from the sixteenth century. These fragments were formerly placed on the left side of the front facing the Place du Carrousel.

Two statues saved from the wreck of the old Hôtel de Ville—those of Jean Aubry, Echevin (Sheriff) of Paris in 1559, and of Pierre de Violle, Provost of the Paris Merchants in 1553—have been erected in the Square Monge.

On assembling after the vacation the Municipal Council will have to consider M. Lheureux's plans for the rearrangement and extension of the buildings of the Faculty of Law. According to this scheme, which as regards its main features appears to have been very favourably received, the new Faculty would occupy the whole area comprised between the Place du Panthéon, the Rue Cujas, the Rue Saint-Jacques, and the Rue Soufflot. The building that it is proposed to erect on this vast site would contain on the ground floor a large amphitheatre or lecture-hall for 350 pupils, and the upper storeys are to contain the professors' rooms, classrooms, libraries, offices, &c. The cost of putting this scheme into execution is estimated at 1,466,800 frs. for building, and 948,926 frs. for expropriating purposes. Half of the expense would be borne by the State and the remainder by the City of Paris.

The Municipal Administration is so well satisfied with the advantages and wear of the wood pavement laid down by an English company, as a trial, in the Champs-Élysées and the Boulevard Montmartre, that it is about to substitute it for macadam in a number of other leading thoroughfares, among them being the Rue Royale, Avenue de l'Opéra, Faubourg St.-Honoré, and parts of the Rue de Rivoli, and the great boulevards that start from the Madeleine.

The buildings that have been in course of construction along the Rue de Vaugirard during the past two years, in connection with the Luxembourg Palace, are now completed, as far as the exterior portions of the work are concerned. The ground-floor will be occupied by the State printing-office, and the first floor is to be arranged as a sumptuous gallery, whereby the President of the Senate will be enabled in future to walk straight from his apartments into the house, without having, as now, to cross the gardens. It is curious that the two main portions of the palace have never hitherto been in proper communication with each other. Under the Directory a connection was established for the first time by means of a covered passage of temporary construction; but this was soon after pulled down, and the site used for greenhouses, which in turn gave way to the barrack-like buildings occupied by the City Finance Department when the Prefecture of the Seine took up its quarters at the Luxembourg after the Franco-German war. These have now disappeared, and been replaced by the building above referred to, which has been designed in strict architectural accordance with the other parts of the palace.

The City authorities have decided to considerably extend the noble thoroughfare now known variously in different parts of its length as the Boulevard d'Enfer and the Boulevard Edgar Quinet. Several years back the Boulevard d'Enfer enjoyed a great but unenviable notoriety as one of the lowest quarters of Paris; it took its name from the gate and the Rue d'Enfer, named also the Porte and Rue St.-Michel. The gate no longer exists; the original Boulevard d'Enfer has changed its name for that of Edgar Quinet, and the street is known as the Rue Denfert-Rochereau. The new name of the boulevard sticks to it, however, only from the Place

The Postmaster-General has written to the First Commissioner of Works to request him to convey to the officers and surveyors of the Office of Works his thanks for their cordial co-operation in establishing the parcels post, and for their assistance in providing the additional accommodation and appliances necessary for the new service. The Crown post-offices throughout the country have been adapted for the purpose, and upwards of 200 post-offices have been considerably enlarged during the last few months.



Denfert to the Boulevard Montparnasse, just where forty years ago stood the famous *Bal de la Grande Chaumière*; and further on along the line of extension it still retains its old appellation. This line of extension is important both in its direction and length. Starting from the Boulevard Montparnasse, it ends at the angle of the Rue du Bac and the Boulevard St. Germain, traversing in its course the Rues Bréa, Vavin, Stanislas, Notre-Dame-des-Champs, Fleurus, du Regard, de Varennes, and Vaugirard, in all of which sad breaches will have to be made in order to join all the sections of the new thoroughfare. The first portion runs along the present Rue du Regard; another begins at the Square des Petits-Ménages; while the third cuts obliquely through the Rues de Varennes and Grenelle, and comes out into the square near the gardens of the Hôtel de Luynes. Many old and interesting buildings will have to come down during the execution of this thoroughfare, among others the ancient seminary of the Rue Notre-Dame-des-Champs.

### CARLISLE CATHEDRAL.

A MEETING of the Cumberland and Westmoreland Antiquarian Society was held last week. Among the papers which had been prepared for the meeting, but which were not read, were three by the Mayor of Carlisle, Mr. R. Ferguson, F.S.A., but which are printed in the *Carlisle Journal*, on "The Tombs in Carlisle Cathedral." Mr. Ferguson said: Does any record exist showing the positions of the graves or vaults (if vaults they are) in the cathedral of Carlisle? Many persons of importance rest here, but the sites of the graves are unknown; while, on the other hand, there are monuments and grave-covers which cannot be certainly assigned to anyone. Great confusion has been occasioned by the shifting of monuments from their original positions. Thus the monument to Bishop Law commences—

Columnæ hujus sepultus est ad pedem,

and one naturally looks on the ground below as the bishop's grave, but the monument is now at the west end of the north choir aisle, while the bishop lies, we believe, in the choir near the pulpit. If the position of his grave is still known, it ought to be in some way marked. The late Dean Cramer is, we believe, buried in the south aisle, but his monument has been reft from him, and is stuck behind the reredos with a row of others. It is hard to believe that valid reason (architectural, æsthetic, or otherwise) can have existed for this shuffling about of monuments which marked actual interments. We have reason to believe that Lord Ellenborough was much annoyed, on visiting the cathedral last summer, to discover that Bishop Law's monument had been moved away from the bishop's grave. It is now placed close to a huge stove, and, as marble bends and warps under changes of temperature, it must ultimately decay. The one next to it, to Mildred Stanley, is already slightly distorted from the heat of the stove. There is another monument which is perishing for want of care—the magnificent brass bell to Bishop Bell. With the best possible intentions it has been covered up with a rough matting of cocoa-fibre to prevent people from treading on it; through this the dust and sand and dry mud from dirty boots penetrates, and the effect is about equivalent to a weekly scouring with a hard brush and sand. Some quarter of a century ago we made a rubbing of this brass, and can aver that it has gone sadly to the bad since then. Surely some means of affording it protection can be devised. It would be a triumph of archæology to identify the knight and lady with three children commemorated by a fine brass, of which the matrix alone remains, under the west window, clearly not its original site. The matrix of another fine brass is in the choir, a figure in a mantle, possibly a female, hardly a priest. There are two more much-worn matrices of lost brasses. The curious little brass to Bishop Robinson, now on the wall of the north aisle, is not *in situ*; it was, in 1703, behind the hangings on the north corner of the high altar, was long forgotten, and was rediscovered at the end of last century. It is possible the bishop lies there: he was hurriedly buried, for he died at Rose Castle at three p.m., and was buried the same evening at the cathedral at eleven o'clock. Besides Bishops Law, Bell, and Robinson, bishops Smith, Fleming, Percy, and Waldegrave have monuments. Bishop Smith sleeps under his monument, a slab in the floor of the choir, and his wife lies beside him. The monument to Bishop Fleming has been moved away from his grave. Bishop Percy is buried elsewhere, and his monument is the glass in the lower part of the east window. Bishop Waldegrave is commemorated by a cenotaph\* and recumbent effigy thereon. Two recumbent effigies and two arched recesses are assigned to early bishops—Everdon, Welton, Kirkby, and Appleby, but the appropriations are doubtful, and the

authorities differ. Mr. Bloxam, for instance, considers the effigy generally assigned to Bishop Welton to be a hundred years after his time. Bishops Irton, Kirkby, Best, Meye, and Senhouse are all said to be buried in the cathedral, but no one knows where. Stranger still, because we come to more modern days, no one can tell where lie the Lord Dacres of the north. Stranger still is it that the fact of their burial in Carlisle Cathedral is mentioned in no local history, recorded by no tradition. Yet there is no doubt that Lord William Dacre of Gillesland and Greystoke, was buried in Carlisle Cathedral, on December 14, 1563, and his son, Lord Thomas, on July 25, 1566, the bishop officiating, and Lord Scrope being the chief mourner. Lord William's father and grandfather were buried at Lanercost, but, probably owing to the family burial-place at Lanercost being included in grant to Sir Thomas Dacre the Bastard, Lord William and Lord Thomas were brought to Carlisle. One would wish to see these burials recorded in the cathedral by a modest monument. In early youth one used to be taught that the bowels of Richard Cœur-de-Lion were buried before the altar in Carlisle Cathedral. Lysons says it is so said, but cites no authority. Rapin says Cœur-de-Lion's body was buried at Fontevraud, his heart at Rouen, and that his bowels were sent into Poitiers, by way of insult rather than compliment. They may have drifted to Carlisle, brought by some of the De Vaux family, whom he had, I fancy, in his service; but this is conjecture. An arched recess in the south aisle had, until recently, an inscription painted over it in memory of Sir John Skelton. This might well be put up again, as the words are known. The recess would once contain an effigy. Successive reflaggings of the floor account in part for the sites of so many burials being lost; there probably was a reflagging after the Commonwealth, when all broken grave covers would be discarded. This would account for Bishop Nicolson having so little to tell about inscriptions in the cathedral. There probably was another about 1768, when a deal of mischief was done in the cathedral. Prior to that time a puzzling inscription existed under the Bishop's throne, which was read by one antiquary—

Hic jacet Eva quonda uxor  
Willi fil Rogeri,

by another—

Hic jacet Ema quonda uxor  
Willielmi filii Rogerii.

There are still several stained-glass windows in the cathedral by way of monuments, but they cannot be called monuments, certainly not personal monuments, unless they are of a portrait character like that to Chancellor Fletcher, which will some day be valuable as a record of nineteenth-century ecclesiastical costume, but the Fletcher window will hardly be followed as a precedent. As for the other windows, putting aside the one to the Tait children, only the verger and a few aged inhabitants know who they commemorate; who can tell where is the Vansittart window? True, they have inscriptions, either on the glass, or on fillets of brass below, but they are written in characters that only an antiquary can read; and, as the brass fillets are fixed at the eye level of a man eight or ten feet high, he requires a glass to aid his eyes. The last addition to the monuments in the cathedral is well enough, and will be improved when the shine is off it, but the less said about some modern ones the better; nor can we say one word in favour of the brass tablets, which, we believe, the Dean and Chapter affect—poor and paltry, we hope to see no more of them. Rightly the Dean and Chapter keep a tight control over the monuments they admit, and of the persons to whom they are erected. The last that has been erected is a modest monument to Sir Henry Fletcher and his gallant brothers. No man was ever better fitted for such honour as has been done Sir Henry; no such six brothers. One new monument is under consideration: that to him who for twenty-five years ruled over the cathedral, but whose reputation and whose influence extended beyond the narrow precincts of an abbey close, beyond even the broader limits of a diocese; a man who, of ecclesiastics departed during this century, has left the greatest mark on local churches and charities.

In the course of a second paper on the same subject, his Worship said in the north aisle of Carlisle Cathedral was a much battered and ill-treated effigy of a bishop. It had once been part of a magnificent monument; it is of Purbeck marble, and traces of paint and gilding can still be made out upon it, while the *mitra preciosa* and the *rationale* on the breast have sockets which have once been filled with jewels, imitation probably, possibly real. If it could be restored to its original brilliancy he was afraid we should in this æsthetic age call it loud and vulgar. It had been subjected to great violence, and the damage was such that if done by malice aforethought, it must have been done by aid of a sledge-hammer; if by accident by the dropping on it of a heavy weight. Mr. Bloxam, F.S.A., in a description of the effigy, stated that it was said to be Bishop de Everdon, who died 1254 or 1255. The monument was assigned by the eminent antiquary Browne-Willis to Bishop Strickland, who died 1419, but this theory might be dismissed as untenable, as many local historians had pointed out that the effigy was of a much earlier period. It was among the thirteenth-century bishops that we must look for the proprietor of the effigy under consideration. The effigy stood in the choir prior to 1292; it would be deprived of its feet and otherwise battered

\* Cenotaphs were common in mediæval times. There is one to Sir Thomas Warton and his two wives at Kirkby Stephen. The whole three are buried at Healaugh in Yorkshire. Other instances are in Westminster Abbey.



by the falling of the roof. After the fire, damaged and battered, it was shifted into a niche hastily cut in the wall for it, and he rather thought the bishop was re-interred under it. In that niche it lay until the restorers pulled it out. It could not have been part of the mausoleum of the bishop, for that had been totally destroyed, nor could it have belonged to Bishop Chalix, for that was uninjured. Leaving out the other thirteenth-century bishops—Thomas Vipont, Ralph Irton, Bishop Hugh, and Walter Malderk—it only left us Silvester de Everdon, and Silvester de Everdon's effigy he took it to be. Everdon was originally a clerk in the Chancery, afterwards the King's chaplain and Vice-Chancellor, and in 1244 Lord Chancellor of England. Lord Campbell said of him, "he very soon retired from State affairs against the wishes of the King, being elected Bishop of Carlisle, and choosing to devote himself to the superintendence of this remote see." That was all Lord Campbell said of him, which made it probable that he died in the north and was buried in the cathedral.

In a third paper the Mayor said there was no great difficulty in assigning to the effigy in the south aisle its real owner. It was Bishop Barrow, and was always so designated until the late Mr. Mackenzie Walcott blundered into assigning it to Welton, and all recent writers of guides had followed Mackenzie Walcott. This bishop by his will bequeathed some plate to the cathedral and 20*l.* to a priest to sing masses for his repose in the Chapel of St. Catherine, within which the monument really stands, though it is now excluded by the screen having been shifted from the side of the monument on which it originally stood to the other side. The side of the monument to the aisle was until recent years mere rough masonry. Bishop Barrow died in 1429, a date much nearer to that 1469 assigned by Mr. Bloxam for his monument than the death of Welton, which occurred in 1362. Nothing need be said as to Bishop Bell's brass. It was *in situ*, and had been more than once engraved. The brass to Bishop Robinson, who died in 1616, was also engraved. This brass in 1703 was "behind the hangings on the north corner of the high altar." Being hidden behind the hangings the brass was forgotten, until the reredos and altar were shifted by Bishop Lyttleton. It was then taken down and for long laid about loose in the aumbry in St. Catherine's chapel. An old manuscript said—"Bishop Robinson's bones were found enclosed in a lead coffin above ground within a coarse tomb: his remains were buried and the top or cover of the tomb laid upon his grave." There was an arched recess in the south aisle. This Willis marked as the tomb of Sir Thomas Skelton, and represents an effigy as lying in it. He also said that about one hundred years before his time there was painted on the wall an inscription. Willis also said this John Skelton died in 1420. Just west of Sir Thomas Skelton's arch was a matrix in the aisle wall which would hold a brass plate sufficiently large to hold the inscription referred to. But where was Sir Thomas Skelton's effigy mentioned by Willis? He thought it never existed for he only mentioned a tomb in his text. It certainly was not there in 1765. Bishop Whelpdale (Bishop of Carlisle 1419 to 1422), by his will left 200*l.* to found a chantry in Carlisle Cathedral for the souls of Sir Thomas Skelton and John Glaston, who lie buried in the south aisle of the cathedral. Glaston's burial-place was unknown, but Willis conjectured it might be under an unknown monument on the opposite side of the aisle between the third or fourth pillars from the east. This was now gone.

### CHURCH BELLS.

A PAPER on "Church Bells" was lately read at Exeter by Mr. F. Iliffe, Mus.D., in which he said: Not the least revered and cherished amongst the possessions of an ancient city are its church bells. Though far more advanced in years than the oldest and most venerable of all its citizens, they ever maintain the vigorous sympathies of youth, and love to hold intercourse with man, vibrating sometimes to his joys, at others to his sorrows; rejoicing with him as he glories over the victories of his country, and mourning for him when he is himself laid to rest. It is proposed to say a few words on the position and sounds of bells, possibly also to suggest in passing the reason why some peals are more satisfactory and beautiful in tone than others. First, as to position: there is no doubt that the best position for a belfry is on an eminence, or if in a crowded thoroughfare, it should be raised to such an altitude that the sounds can get well away without receiving obstruction from the buildings by which it is surrounded. Strasburg and Antwerp may be quoted amongst others as excellent specimens of belfries, the bells at both these places being perhaps in the best positions it is possible for them to occupy; indeed, at Strasburg some of them may be easily seen, hanging as they do almost outside the ornamental work of the tower. The belfry at Bruges may be mentioned as an instance of one in a bad position—being almost in a hollow—so that the sounds scarcely seem to travel beyond its own level. Our larger belfries are, as a rule, excellently situated in England, and in this we contrast favourably with some of our continental neighbours. In quality of tone, and more absolute correctness of pitch, we are, however, certainly behind them. It has been often

said that very little has been written in books about bells, that it is a subject upon which we have at present only scanty information. This is true, and the reason for it is not difficult to find. The subject however is one of importance, possessing an interest common to all, and it is hoped will not from trifling considerations be allowed to remain in the background. As to the sound of bells, one is sorry to be obliged to say that we in England have so many peals which are not only very indifferent in quality of tone, but are very much out of tune amongst themselves; and that this should be allowed to remain so is the more to be regretted when so much is being done by mathematical musicians to improve and perfect our popular instruments in the qualities just mentioned. Six years ago I was told by an eminent professor of acoustics that I should very soon be required to play the preludes and fugues of Bach on an organ with twenty-four sounds to the octave, *i.e.*, quarter tones; and an instrument built in this manner was exhibited at Kensington a short time ago. This is not the place, however, for me to say more on this point, but why is there no improvement in the founding of our bells? It is impossible to hear the continental bells without being struck with their immense superiority over ours in England, both in beauty of tone and more absolute correctness of tune; in truth, it would not be difficult to mention several well-known English peals which are so discordant that the people of Ghent, Tournay, or Antwerp would have pulled them down the moment they heard them, and yet we live on and on quietly amid all this dissonant clangour. What is wanted, I feel sure, is that the masses of the people as well as the authorities should be keener in this matter, and that they should without scruple at once condemn what is bad or indifferent. Why are our eyes offended at the ugliness of some of our towns? Some will say this has been the fault of architects; or, where architects have not been engaged, it is the fault of the ordinary builders. Doubtless some fault may rest here, but I venture to think the real secret of the difficulty lies in the fact that the masses of the people have not sufficiently sensitive tastes and feelings as yet in these matters, and until they are more cultivated by an appreciation of greater correctness in general design, as well as greater beauty in detail, I was going to say by an insight into the finer arts, we shall not be able to boast successfully of the stateliness of our towns. But to return to bells—every one loves them, from the child who associates them with the merry days of his young life, to the old man in whose weary brain they conjure up bright memories of times gone by. Let us hope, therefore, that greater attention may be paid them, and that the "tide of music's silv'ry sea" may in our church bells be made more harmonious. Let me say, in conclusion, that in writing this unpretending little paper, my object has not been in any way to blame the past. I have been only prompted by a desire to call attention to the somewhat neglected state of a beautiful subject, one full of interest and importance.

### MR. HERKOMER'S NEW SCHOOL OF ART.

A PROJECT which had a simple origin some two years ago in the request of a young lady to become a pupil of Mr. Herkomer, A.R.A., is now about to be realised. Mr. Herkomer did not wish to undertake one pupil alone, but with his characteristic generosity towards students, he intimated that a class formed in his neighbourhood should have the full benefit of any advice he could give. Thereupon the young lady's guardian offered to build a studio for this purpose, but as time passed and matters were discussed the studio scheme was expanded to that of an art school, until to-day within a short time of its opening we have the promise of an art training unique in this country. The modern art movement has flooded the country with institutions, all more or less of the type of the Academy, Slade, and South Kensington Schools, but with these the new school has few points of resemblance. Mr. Herkomer has gained his experience from all parts of the Continent and America; he has studied the systems pursued in their schools, and has noted both their defects and good points. His present plan is not yet fully developed. He has many schemes in his mind, and as he will be the sole responsible head and sole teacher of the pupils, who will gather in the school at Bushey, where he has so long made his home, it only depends upon him to give his students the plan of study best suited to their requirements. So far as he can, he will control the whole tenor of their life whilst under his care. Every one will live at Bushey, and no one will be allowed to join the school for less than nine months. The students will have perfectly free intercourse with Mr. Herkomer at all times of the day; but they will be left at the same time a good deal to themselves. They will pose their own models, and work in their own method, but directly they feel in any difficulty they will be allowed to cross from the school to their master's studio and ask his advice or watch him at work. Mr. Herkomer wants no imitators and no dilettanti. He wants hard-working students who love their art. For this reason he has fixed the fees low, and made no restrictions as to the hours of work. His own advice and assistance will be given for love, and as no salaries have to be paid save those of the models



and porters, the working expenses cannot be very great. Thus for 18s. each student can paint from the model daily from ten a.m. to three p.m., and from seven to nine p.m., throughout the whole nine months, and can use the studios all day through if wished, whilst without any additional expense the studios will be thrown open during the entire three months' holiday to any who, having good designs of pictures, have no studio wherein to execute them. Life-size studies will be chiefly encouraged, and, as canvases when large are expensive, Mr. Herkomer has exercised his forethought in this direction likewise, and hopes to be able to make arrangements for the sale on the premises of all necessary painting materials at the lowest possible rate. The schools are large and well built for their purpose. Entering through some cloisters designed by Mr. Herkomer, one passes to a long corridor communicating with the various studios, and closed at the end by a large sheet of plate-glass which permits an extended view of the slopes and hills around. Each studio is of such a size that every one painting can have an equally good view of the model. The room at present set apart for the male students has a fine oak panelling round its lower walls, and a magnificent piece of antique wood-carving nearly covering one side; whilst the light admitted from the side, at a great height, produces a solemn and mellowed effect. The ladies' studio has both a top and side light, and at times the male and female students will change about, to get different effects of light. A smaller studio opposite, intended for experiments of light and for minute work, has not only a double-top light of sloping and flat ground-glass, but projects into a triangle entirely fenced in with ground-glass from floor to roof, to give the opportunity of painting the nude figure entirely surrounded by light. All the flooring is laid on a foundation of concrete two feet deep, and the warming and ventilation are both well arranged. Electric light will be used as soon as a perfectly steady flame is obtainable. Beyond the studios are porters' rooms, models' bedrooms, and smaller rooms for hats, cloaks, and the studies of the students, whilst a special feature of the school is a specimen gallery which will always be open to receive the works of contemporary artists which Mr. Herkomer hopes to borrow from time to time. A few casts will be placed about the rooms, though the students will only work from the life and the landscapes around. Both the men and the women will have equal advantages, for, although Sir Frederick Leighton refused a nude class at the Academy schools for ladies, on the ground that their want of imagination afterwards rendered the class useless, Mr. Herkomer has too keen an appreciation of Rosa Bonheur's genius to deny that the training might prove useful. Nothing that he does himself will be kept from the students; his paintings can be seen day by day, and all the processes connected with etching, mezzotint, copper and steel engraving, and the casting of his designs in bronze and silver, which are one and all carried out close to his studio, will be open to the study of the Bushey artists. Their number Mr. Herkomer has limited to sixty, as he wishes to know and help each one individually. He has had many applications for admission already; but as he is rather inclined to begin with a still smaller number, the selection of the first pupils will be very rigid, and only those of great promise are likely to gain admission. Those who are still wishing to be amongst the first must send in a drawing of a nude figure from the life; or, if landscape students, of a landscape from nature and a head from life, during this month or next, when the final selection will be made. Strangely enough, during his recent visit to the United States, so much interest was evinced in the projected school that had Mr. Herkomer so wished he could have commenced his first term with his school full of Americans alone.

### REGISTRATION OF DESIGNS.

THE new Patent Act consolidates and amends the law relating to the registration of designs, and affording copyright therein. The word "design" and "copyright" are defined as follows:—

In and for the purposes of this Act design means any design applicable to any article of manufacture, or to any substance artificial or natural, or partly artificial and partly natural, whether the design is applicable for the pattern or for the shape or configuration, or for the ornament thereof, or for any two or more of such purposes, and by whatever means it is applicable, whether by printing, painting, embroidering, weaving, sewing, modelling, casting, embossing, engraving, staining, or any other means whatever, manual, mechanical, or chemical, separate or combined, not being a design for a sculpture, or other thing within the protection of the Sculpture Copyright Act of the year 1814 (fifty-fourth George III., chapter fifty-six).

Copyright means the exclusive right to apply a design to any article of manufacture or to any such substance as aforesaid in the class or classes in which the design is registered.

The author of any new and original design shall be considered the proprietor thereof, unless he executed the work on behalf of another person for a good or valuable consideration, in which case such person shall be considered the proprietor, and every person

acquiring for a good or valuable consideration a new and original design, or the right to apply the same to any such article or substance as aforesaid, either exclusively of any other person or otherwise, and also every person on whom the property in such design or such right to the application thereof shall devolve, shall be considered the proprietor of the design in the respect in which the same may have been so acquired, and to that extent, but not otherwise.

The Act provides that the Comptroller of Patents may, on application by the owner, register "any new or original design not previously published in the United Kingdom." The application must "contain a statement of the nature of the design, and the class or classes of goods which the applicant desires that the design be registered." The same design may be registered in more than one class; and in case of doubt as to the class in which it should be registered, the Comptroller may decide. He may also refuse to register any design offered for registration, but from his decision an appeal may be made to the Board of Trade, which "shall, if required, hear the appellant and the Comptroller," and may then make an order, determining whether, and on what conditions, if any, registration is to be permitted.

When a design is registered, the registered proprietor shall have copyright in it for five years from the date of registration. But, before the "delivery on sale of any articles to which a registered design has been applied," the proprietor must furnish the Comptroller with "exact representations or examples of the design," or his name may be erased from the register; and before selling articles to which the design is applied, he must cause each article to be "marked with the prescribed mark, or with the prescribed word or words or figures, denoting that the design is registered," and if he fails to do this "the copyright in the design shall cease," unless the proprietor shows that he took all proper steps to ensure the requisite marking.

During the term of copyright the design is not to be open to inspection by anyone but the proprietor, or a person authorised by the Comptroller or the Court; but, when copyright has ceased, the design may be open to general inspection. If a registered design "is used in manufacture in any foreign country, and is not used in this country within six months of its registration in this country, the copyright in the design will cease." A register of designs is to be kept at the Patent Office, and is to contain names and addresses of proprietors of designs, and notifications of assignments of such designs. The fees payable for registration and all other matters under the Act, are to be prescribed from time to time by the Board of Trade. Exhibition at a certified industrial or international exhibition, prior to registration of a design, is not to hinder the proprietor from applying for registration, providing that such application is made within six months from the opening of the exhibition, and that the proprietor has given the Comptroller notice of his intention to exhibit.

Piracy of a registered design, or the use "for the purposes of sale" of "any fraudulent or obvious imitation thereof, in the classes of goods in which such design is registered," is declared to be illegal, unless the consent of the owner has been obtained, and for "every offence" a penalty of not more than 50s. may be recovered, or the proprietor may bring an action for damages.

### THE LATE MR. BUNNEY.

A LETTER has been addressed by Mr. Ruskin to Mrs. Bunney with regard to the fund collected for her benefit. In it he says: "I am honoured in receiving from the subscribers to the fund which has been collected in memory of your husband a charge to convey to you such expression as may be possible to me of the feeling in which it is presented to you for the fulfilment of his wishes, as you may judge fittest, in the education of his children. I have called it a memorial fund; but, indeed, the subscribers recognise that Mr. Bunney's name will remain ineffaceably connected with the history of all efforts recently made in Italy for preservation of true record of her national monuments; nor less with the general movement, in which he so ardently and faithfully shared, for the closer accuracy and nobler probity of pictorial—more especially of landscape—art; a movement which was initiated about the time when he first took up his residence in Venice, and of which he remained, to the day of his death, the most clearly recognised exponent and representative to the foreign schools, both of Italy and America. This fund has been collected, therefore, not, as is too often the case in such efforts, for the idle inscription of a name which would otherwise have been forgotten, but, trusting your husband's just fame to the lovers of Venice, it is presented to you as a token of the solemn affection in which all we his friends hold, and with which we shall always think of, a man whose careful art was the constant and unstinted enthusiasm of an entirely pure, loyal, and rightly religious soul. And I pray you, madam, now and always, since you know me one of your husband's chief mourners, so also to hold me one of your most devoted servants, J. RUSKIN." The sum handed to Mrs. Bunney by Mr. Ruskin was 673*l.* 13*s.* 6*d.*



## NOTES AND COMMENTS.

It is astonishing how well Mr. RUSKIN'S books keep their high prices. A set of the "Modern Painters" is not to be had much under 30*l.*, and small books like "The Elements of Drawing" and "The Two Paths" are at least thirty shillings each. "The Political Economy of Art," which was published for half a crown, is commonly sold for a guinea. The "Selections from Mr. RUSKIN'S Writings" are valued at five times the original price. From six to ten shillings are asked for a number of the *Quarterly Review* containing the review of Lord LINDSAY'S "Progression by Antagonism," or one with the review of Sir CHARLES EASTLAKE'S book on the "History of Painting." But it may be doubted whether the people who pay those prices condescend to read a page of one of Mr. RUSKIN'S books.

GLASS pipes are now substituted in many chemical works for the earthen or pot pipes hitherto employed for the conveyance of hydrochloric acid gas from the furnaces to the condensers, and, being impervious to acid, are found to last longer than those formerly used. The clay pipes exposed to hot acid gases are often destroyed in less than six months, whereas the glass pipes remain unaffected. They have another advantage, as they cool the gases more rapidly than the thicker clay pipes, and condensation is consequently more completely effected.

BUILDERS rarely take actions against architects, and the failure of a Scottish builder in the Aberdeen Sheriff's Court to uphold an action may possibly suggest to others the inconvenience of litigation. This builder contracted to execute the carpentry in a cottage for an Aberdeen architect; he received three instalments, but he declined to complete the work unless a fourth was paid. The architect of course declined, but offered to pay the entire balance as soon as the contract was finished. The builder had recourse to his lawyers, which necessitated an action on the part of the architect to compel him to complete his work, and for damages on account of the delay. A referee declared that the contract had not been completed, and the builder was obliged to do his work. Then came the question of expense. It so happened that the contract deed did not specify in what proportions the money was to be paid. The Sheriff had therefore to consider the custom in such cases, and he decided that as two-thirds of the amount had been paid, it was neither inequitable nor unreasonable to withhold the balance until the work had been carried out. The builder has been compelled to pay half a year's rent of the house as damages for his delays.

THE Local Government Board have considered it to be expedient at the present time to urge the destruction of unsanitary dwellings. By the Act of 1868 the medical officer of health is required to inform the sanitary authority of the existence of every house which is in a condition dangerous to health. The report is to be referred to a surveyor or engineer, who is, in turn, to report upon the cause of the evil, and to state whether the evil can be remedied by structural alterations, or whether the premises must be demolished. A building need not be unfit for human habitation to be considered dangerous. It may be an "obstructive building"—that is to say, if by reason of its proximity to other buildings it stops ventilation, or conduces to render other buildings unfit for habitation, in such case it is to be reported on as if it were a building of the worst class. Those powers may be exercised not only in towns with a population of 10,000 and upwards, but in all urban sanitary districts. Wherever there is an energetic medical officer to take the initiative much can be done to remove dangerous buildings. His action would now have the sanction of the Local Government Board.

THE name of BEWICK will always command respect in England, although his style of wood-cutting has long become obsolete. The art has passed through many revolutions since his time, and artists now endeavour to gain a breadth in illustrations that was impossible with the regular lines and prim treatment that are to be seen in BEWICK'S figures of birds and in his tail-pieces. A man would fail to find employment who revived that style of work; nevertheless BEWICK'S cuts are in request in this country, and especially in the United States. There is now a fear among the collectors that the value of their impressions may be greatly diminished. It is possible that before long there will be an

abundance of impressions in the markets. By the death of Miss BEWICK, the blocks which that lady guarded so religiously have become saleable products, which the executors must convert into money. Miss BEWICK received many offers for them, but she declined to sell or to lend the blocks. The number of impressions that have been taken from them cannot have injured their surface, and, with careful printing, impressions might be obtained equal to those which now are so expensive. The Americans will endeavour to secure BEWICK'S blocks—and large prices will have to be paid for them—but a publisher would be incurring great risk who imagined that they would serve as illustrations in books for the general public. There must be another revolution in art to make BEWICK admired by the million.

THE most primitive bridge in England is to be found over the river Barle, near Exmoor, in Somerset. It is of the rudest construction, and if stepping-stones are taken to represent the first stage in structures for making transit easy, the Barle bridge may be accepted as the next stage. It is 180 feet long, 5 feet in width, and the slabs are 6 inches thick. When the water is at ordinary height, the bridge is about 3 feet above it. Local traditions, which ignore evolution, have ascribed the wonderful work to the Evil One, and it is one of the so-called Devil's Bridges in Great Britain. But there is nothing supernatural about the stones, and it is simply the work of some primitive villagers.

SOME archæological discoveries of a curious and interesting nature have lately been made by a M. MOREL, in the neighbourhood of Nyons (Drôme). After long excavating in the fields where, from the previous discovery of the remains of a Gallic warrior interred with his arms and war chariot—which figured in the 1878 Paris Universal Exhibition—he had reason to believe he might find further relics of the Gallic period, M. MOREL, at a depth of 6 feet below the surface, came across a Roman chamber, paved with mosaics. This room appears to have been approached by a small porch, pieces being found of the bases and capitals of some small Doric columns. Among the rubbish were many objects of domestic use; Roman tiles, all fractured, with the exception of one measuring 10 inches by 14 inches; innumerable fragments of black and red pottery, and of *dolea* or wine-jars; a finger ring, some pieces of bronze, carpenters' nails, and several of the large box-wood pins used by the Romans for the hair. The inhabitant of the room possessed, moreover, several mortars of the Auvergne volcanic stone, and must have used sharpening or grindstones of very fine texture, similar to those employed nowadays for the razor, fragments of both of these having been found.

It is generally supposed to be good policy to interpret liberally the sum that is fixed in the conditions of a competition for the erection of a building. Designs which correspond with the money that is proposed to be expended are often said to have little chance of success against designs which, being rich in sculpture and ornament, appeal to the imagination of those who are not aware how much work of the kind must cost. Who, for instance, could expect to erect in the nineteenth century a town hall for 8,000*l.*, the sum which the Council of Hawick proposed to lay out? It was natural to assume that the Hawick people, if they saw a good design, were likely to be more liberal. But Mr. HONEYMAN, to whom the designs were entrusted, resolutely took his stand upon finance. He evidently believed that the first question for him to decide was, How many of the competitive plans can be carried out for 8,000*l.*? We are not surprised to find from the report that, under the circumstances, there was only one plan eligible. Such a test can rarely be sustained. In the first Glasgow competition for the Municipal Buildings it may be doubted if there was even one which corresponded with the amount of money that was assigned by the Corporation for the building. Yet prizes were awarded. In another notable instance, the competition for the Edinburgh Cathedral, the prize was carried off by a design the cost of which the author himself stated was beyond the sum fixed by the trustees. There will be, of course, a good deal of grumbling at the course taken by Mr. HONEYMAN, and it is a difficult task to fix the cost of a design in the short time that a referee can afford; but it will be admitted there is justice, although of a Rhadamantine kind, in setting aside those designs which are supposed to be more costly than the clients proposed.



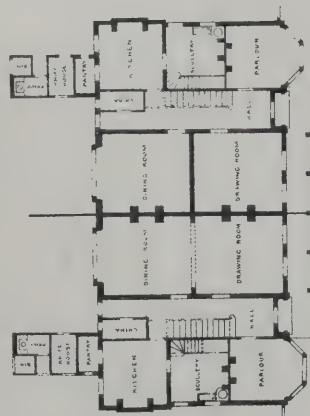






SEMI-DETACHED VILLAS  
Eastward-Ho-Estate  
FELIXSTOW

W. Eade, F.R.I.B.A.  
ARCHITECT, IPSWICH.



GROUND PLAN



1<sup>st</sup> FIRST FLOOR PLAN. 1<sup>st</sup> ATTIC PLAN.











HOUSE, MOTTINGHAM PARK, ELTHAM.

J.S. MOYE - ARCHITECT.









"INK-PHOTO," SPRAGUE & CO., LONDON

The Hall.

Autumn. Remains.  
by H. Cameron, Esq.





INK PHOTO. SPRAGUE & CO. LONDON

*For a better copy  
see the original sketch.*









"INK-PHOTO", SPRAGUE & CO., LONDON.

ENTRANCE FRONT, WESTWOODHAY HOUSE.

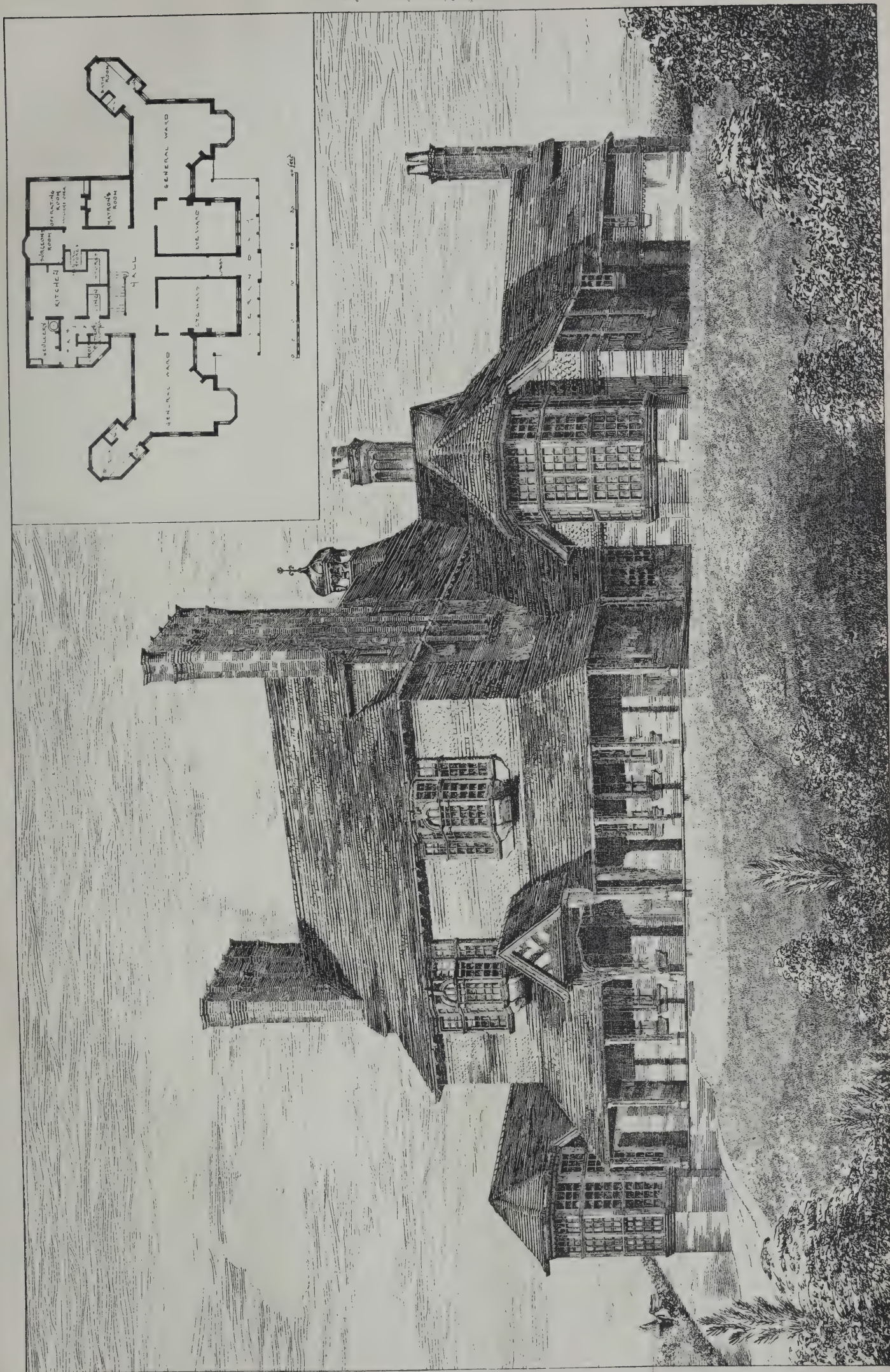
AS ALTERED.

R.W. EDIS, F.S.A. ARCHITECT.









THE BUCHANAN COTTAGE HOSPITAL, ST LEONARDS ON SEA.







## ILLUSTRATIONS.

AN ARAB OFFICER.—A HÂLT.

THE two illustrations of French soldiers are reproductions from two paintings, for which we are indebted to M. E. DETAILLE, who stands first among living painters of military life. The success which attends subjects of the kind in France suggests the question why similar subjects are not attempted by English painters. We have Eastern soldiers who are as picturesque as the French Arabs, but representations of them are not supposed to be attractive to picture buyers; and an English painter would hesitate for a long time before he selected a subject from the manoeuvres at Aldershot.

ENTRANCE FRONT, WESTWOODHAY HOUSE.

THIS illustration is taken from a water-colour drawing, showing Mr. EDIS's work, which was exhibited this year at the Royal Academy.

HIGHFIELD, MOTTINGHAM PARK, KENT.

OUR illustration represents a house now in course of erection for Mr. JOSEPH S. MOYE, the architect to the estate, which extends from Camden Park, Chislehurst, to within a few minutes' walk of the Eltham station. The house is situated near the station, and commands some very picturesque views of the surrounding country. The materials being used are red bricks, relieved by BROWN's ornamental and moulded brickwork, Broseley ornamental and plain tiles, and J. K. COOPER's terra-cotta ridges and finials. The builder is Mr. JOHN GROVER, of Wilton Works, Islington, N.

BUCHANAN HOSPITAL, ST. LEONARDS.

THIS hospital has just been erected at St. Leonards-on-Sea on a plot of ground given by Mr. C. G. EVERSFIELD, at the junction of Springfield Road with the London Road. The ground plan given speaks for itself. On the first floor is placed a convalescent-room, several small private wards, and the bedrooms for the staff. Mr. W. H. MURRAY is the architect, under whom the works have been carried out in a most satisfactory manner by Messrs. ELDRIDGE & CRUTTENDEN, of St. Leonards, the total cost, including boundary walls, fences, &c., being about 2,800*l*.

SEMI-DETACHED HOUSES, EASTWARD HO ESTATE, FELIXSTOWE.

THESE houses have just been erected on an estate laid out for Messrs. BUGG & JOLLY, from plans prepared by Mr. W. EADE, F.R.I.B.A., Post Office Chambers, Ipswich.

The houses stand in an attractive position on the cliffs, and have a fine sea view, commanding the entire sweep of Felixstowe Bay. They are substantially and carefully built of best red Suffolk bricks. The roofs are covered with Broseley plain tiles, and the fittings throughout are of good character. Mr. THOS. WARD, of Felixstowe, was the contractor for the works.

## THE SOCIETY OF ARTS.

THE following prizes are offered by the Council for the year 1883: *John Stock Prize*.—A Society's gold medal, or 20*l*., for the best design from a poem, or from history, or from the Scriptures, prepared with a view to mural decoration. *Benjamin Shaw Prize*.—1. A Society's gold medal, or 20*l*., for the best plan for "obviating or diminishing risk to life in the operations of coal-mining." 2. A Society's gold medal, or 20*l*., for the best plan for "obviating or diminishing risk to life in the manufacture, storage, and transport of explosives." The Council leave it to the competitors to bring the plans under their notice in any way they may think proper, whether by model, written description, or otherwise. *Howard Prize*.—A prize of 100*l*. for the best essay on the "utilisation of electricity for motive power." Preference will be given to that essay which, besides setting forth the theory of the subject, contains records with detailed results of actual working or experiment. The Society reserves the right of publishing the prize essay. *Fothergill Prize*.—A Society's gold medal, or 20*l*., is now offered for the best invention having for its object the prevention or extinction of fires in theatres or other places of public amusement. *Mulready Prize*.—A Society's gold medal "to that student in a school of art in the United Kingdom who exhibits the best drawing from the nude figure, executed in black and red chalk, in the manner so successfully practised by Mulready."

Designs, plans, models, essays, descriptions, inventions, &c.,

intended to compete for any of the above prizes, must be sent in on or before October 31, 1883, to the Secretary of the Society of Arts, John Street, Adelphi, London. Further particulars relating to the prizes may be obtained on application to the Secretary.

## THE EDINBURGH MUSEUM OF SCIENCE AND ART.

THE plans for the completion of the Museum of Science and Art have now, according to the *Scotsman*, been all but finally adjusted, on the footing of making provision in the new wing for the accommodation of the Scottish Society of Antiquaries. In external appearance the west elevation of the completed building will repeat the familiar features of the east end. There will be a corner pavilion, projecting considerably beyond the general line of the main front, and pierced in all its three storeys, on the north and west sides, with square or round-headed windows, the latter separated by detached shafts. To the south of this will extend a range of windowless wall, relieved with panelling, and indicating that the rearward portion of the interior is arranged as a lofty hall, lighted from the roof, corresponding to that now occupied by the natural history collections. On the ground floor of the corner pavilion, a space, equal to that at present appropriated as the lecture-room, will be set apart for the library of the museum. Under Professor Archer's judicious direction there has been gradually accumulating a goodly store of books, bearing on various subjects illustrated in the museum, and embracing, in particular, many valuable works of reference in connection with the fine arts. In present circumstances, it is difficult to find sufficient storage room for these volumes, not to speak of affording facilities for the public use of them. The new library, however, will amply provide, not only for the present collection, but for the acquisitions of many years to come; while, *en suite* with it, there will be constructed a commodious reading-room, in which books not elsewhere readily available may be consulted, under arrangements similar to those in operation at the South Kensington Museum. The two upper floors of the pavilion—reproducing, in size and shape, those in the east wing now occupied by Indian and geological collections—are to be placed at the disposal of the Antiquaries, and will afford for the housing of their archaeological treasures about four times as much space as they can command at the Royal Institution. A portion of the first floor will be partitioned off as the library and council-room of the Society. It has, we understand, been stipulated that both floors shall be entirely shut off from the galleries of the Industrial Museum, and access to both will be obtained from the street by a staircase enclosed in a square tower, which will serve agreeably to diversify the west elevation. The hall running southward from the pavilion will be devoted, so far as regards the ground floor, to the exhibition of machinery, the two open galleries carried round the walls being assigned to specimens illustrative of ethnology and cognate sciences. Between the hall and the existing ground-floor rooms on the south side of the museum there will be found space for a work-room, as also for a refreshment-room, sufficiently large to meet the public requirements. The present spacious refreshment-room will thus become available for general museum purposes; while, on the transference of all machinery to the new wing, the ground floor of the great central hall, now partially occupied with that class of objects, will be allocated exclusively to the constructive arts.

## THE CHATEAU DE CHAMBORD.

THE following description of the Château de Chambord is from an article by Mr. Henry James in the *Atlantic Monthly*:

On the way to Chambord you enter the flat and sandy Sologne. The wide horizon opens out like a great *potager*, without interruptions, without an eminence, with here and there a long, low stretch of wood. There is an absence of hedges, fences, signs of property; everything is absorbed in the general flatness—the patches of vineyard, the scattered cottages, the villages, the children, planted and staring, and almost always pretty, the women in the fields, the white caps, the faded blouses, the big sabots. At the end of an hour's drive (they will assure you at Blois that even with two horses you will spend double that time) I passed through a sort of gap in a wall, which does duty as the gateway of the domain of an exiled pretender. I drove along a straight avenue, through a disfigured park—the park of Chambord has twenty-one miles of circumference—a very sandy, scrubby, melancholy plantation, in which the timber must have been cut many times over, and is to-day a mere tangle of brushwood. Here, as in so many spots in France, the traveller perceives that he is in a land of revolutions. Nevertheless, its great extent and the long perspective of its avenues gives this desolate bocage a certain majesty; just as its shabbiness places it in agreement with one of the strongest impressions of the château. You follow one of these long perspectives a proportionate time, and at last you see the chimneys and pinnacles of Chambord rise apparently out of the



ground. The filling of the wide moats that formerly surrounded it has, in vulgar parlance, let it down, and given it an appearance of topheaviness that is at the same time a magnificent grotesqueness. The towers, the turrets, the cupolas, the gables, the lanterns, the chimneys, look more like the spires of a city than the salient points of a single building. You emerge from the avenue and find yourself at the foot of an enormous fantastic mass. Chambord has a strange mixture of society and solitude. I enjoyed my visit to this extraordinary structure as much as if I had been a Legitimist; and indeed there is something interesting in any monument of a great system, any bold presentation of a tradition. You leave your vehicles at one of the inns, which are very decent and tidy, and in which everyone is very civil, as if in this latter respect the influence of the old *régime* pervaded the neighbourhood, and you walk across the grass and the gravel to a small door—a door infinitely subordinate, and conferring no title of any kind on those who enter it. Here you ring a bell, which a highly respectable person answers (a person perceptibly affiliated, again, to the old *régime*), after which she ushers you across a vestibule into an inner court. Perhaps the strongest impression I got at Chambord came to me as I stood in this court. The woman who admitted me did not come with me; I was to find my guide somewhere else.

The speciality of Chambord is its prodigious round towers. There are, I believe, no less than eight of them, placed at each angle of the inner and outer square of buildings; for the castle is in the form of a larger structure which incloses a smaller one. One of these towers stood before me in the court; it seemed to fling its shadow over the place; while above, as I looked up, the pinnacles and gables, and even the enormous chimneys, soared into the bright blue air. The place was empty and silent; shadows of gargoyles, of extraordinary projections, were thrown across the clear gray surfaces. One felt that the whole thing was monstrous. A cicerone appeared—a languid young man, in a rather shabby livery—and led me about with a mixture of hurry and delay, of condescension and humility. I do not profess to understand the plan of Chambord, and I may add that I do not even desire to do so; for it is much more entertaining to think of it, as you can so easily, as an irresponsible insoluble labyrinth. Within, it is a wilderness of empty chambers, a royal and romantic barrack. The exiled prince to whom it gives its title has not the means to keep up four hundred rooms; he contents himself with preserving the huge outside. The repairs of the prodigious roof alone must absorb a large part of his revenue. The great feature of the interior is the celebrated double staircase, rising straight through the building, with two courses of steps, so that people may ascend and descend without meeting. This staircase is a truly majestic piece of humour; it gives you the note, as it were, of Chambord. It opens on each landing to a vast guard-room, in four arms, radiations of the winding shaft. One of these arms served as a theatre on the occasion on which Molière's "Bourgeois Gentilhomme" was played to Louis XIV. My guide made me climb to the great open-work lantern which, springing from the roof at the termination of the great staircase (surmounted here by a smaller one), forms the pinnacle of the bristling crown of Chambord. This lantern is tipped with a huge *fleur de lys* in stone—the only one, I believe, that the Revolution did not succeed in pulling down. Here, from narrow windows, you look over the wide, flat country and the tangled, melancholy park, with the rotation of its straight avenues. Then you walk about the roof, in a complication of galleries, terraces, balconies, through the multitude of chimneys and gables. This roof, which is in itself a sort of castle in the air, has an extravagant, fabulous quality, and with its profuse ornamentation—the salamander of Francis I. is a constant motive—its lonely pavements, its sunny niches, the balcony that looks down over the closed and grass-grown main entrance, a strange, half sad, half brilliant charm. The stonework is covered with fine mould. There are places that reminded me of some of those quiet, mildewed corners of courts and terraces, into which the traveller who wanders through the Vatican looks down from neglected windows. They show you two or three furnished rooms, with Bourbon portraits, hideous tapestries, from the ladies of France, a collection of the toys of the *enfant du miracle*, all military and of the finest make. "Tout cela fonctionne," the guide said of these miniature weapons; and I wondered, if he should take it into his head to fire off his little cannon, how much harm the Comte de Chambord would do.

From below, the castle would look crushed by the redundancy of its upper protuberances, if it were not for the enormous girth of its round towers, which appear to give it a robust lateral development. These towers, however, fine as they are in their way, struck me as a little stupid; they are the exaggeration of an exaggeration. In a building erected after the days of defence, and proclaiming its peaceful character from its hundred embroideries and cupolas, they seem to indicate a want of invention. I shall risk the accusation of bad taste if I say that, impressive as it is, the Château de Chambord seemed to me to have altogether a little of that quality of stupidity. The trouble is that it represents nothing very particular; it has not happened, in spite of sundry vicissitudes, to have a very interesting history. Compared with

that of Blois and Amboise its past is rather vacant, and one feels to a certain extent the contrast between its pompous appearance and its spacious but somewhat colourless annals. It had indeed the good fortune to be erected by Francis I., whose name by itself expresses a good deal of history. There has been much discussion as to the architect employed by Francis I., and the honour of having designed this splendid residence has been claimed for several of the Italian artists who early in the sixteenth century came to seek patronage in France. It seems well established to-day, however, that Chambord was the work neither of Primaticcio, of Vignola, nor of Il Rosso, all of whom have left some trace of their sojourn in France; but of an obscure yet very complete genius, Pierre Nepveu, known as Pierre Trinquet, who is designated in the papers which preserve in some degree the history of the origin of the edifice, as the *maître de l'œuvre de maçonnerie*. Behind this modest title, apparently, we must recognise one of the most original talents of the French Renaissance; and it is a proof of the vigour of the artistic life of that period that, brilliant production being everywhere abundant, an artist of so high a value should not have been treated by his contemporaries as a celebrity. We manage things very differently to-day.

The immediate successors of Francis I. continued to visit Chambord, but it was neglected by Henry IV., and was never afterwards a favourite residence of any French king. Louis XIV. appeared there on several occasions, and the apparition was characteristically brilliant; but Chambord could not long detain a monarch who had gone to the expense of creating a Versailles ten miles from Paris. With Versailles, Fontainebleau, Saint-Germain, and Saint-Cloud within easy reach of their capital, the later French sovereigns had little reason to take the air in the dreariest province of their kingdom. Chambord, therefore, suffered from royal indifference, though in the last century a use was found for its deserted halls. In 1725 it was occupied by the luckless Stanislaus Leszczyński, who spent the greater part of his life in being elected King of Poland and being ousted from his throne, and who, at this time a refugee in France, had found a compensation for some of his misfortunes in marrying his daughter to Louis XV. He lived eight years at Chambord, and filled up the moats of the castle. In 1748 it found an illustrious tenant in the person of Maurice de Saxe, the victor of Fontenoy, who, however, two years after he had taken possession of it, terminated a life which would have been longer had he been less determined to make it agreeable. The Revolution, of course, was not kind to Chambord. It despoiled it in so far as possible of every vestige of its royal origin, and swept like a whirlwind through apartments to which upwards of two centuries had contributed a treasure of decoration and furniture. In that wild blast these precious things were destroyed or for ever scattered. In 1791 an odd proposal was made to the French Government by a company of English Quakers, who had conceived the bold idea of establishing in the palace a manufacture of some commodity not to-day recorded—possibly of soap or of candles. Napoleon allotted Chambord as a "dotation" to one of his marshals, Berthier, for whose benefit it was converted, in Napoleonic fashion, into the so-called principality of Wagram. By the Princess of Wagram, the marshal's widow, it was after the Restoration sold to the trustees of a national subscription, which had been established for the purpose of presenting it to the infant Duke of Bordeaux, then prospective King of France. The presentation was duly made, but the Comte de Chambord, who had changed his title in recognition of the gift, was despoiled of his property by the government of Louis Philippe. He appealed for redress to the tribunals of his country, and the consequence of his appeal was an interminable litigation, by which, however, finally, after the lapse of twenty-five years, he was established in his rights. In 1871 he paid his first visit to the domain which had been offered him half a century before, a term of which he had spent forty years in exile. It was from Chambord that he dated his famous letter of July 5 of that year—the letter directed to his so-called subjects, in which he waves aloft the white flag of the Bourbons. On the whole, Chambord makes a great impression; and the hour I was there, while the yellow afternoon light slanted upon the September woods, there was a dignity in its desolation. It spoke, with a muffled but audible voice, of the vanished monarchy, which had been so strong, so splendid, but to-day has become a sort of fantastic vision, like the cupolas and chimneys that rose before me. I thought while I lingered there of all the fine things it takes to make up such a monarchy, and how one of them is a superfluity of mouldering empty palaces. Chambord is touching—that is the best word for it; and if the hopes of another restoration are in the follies of the Republic, a little reflection on that eloquence of ruin ought to put the Republic on its guard. A sentimental tourist may venture to remark that in the presence of several châteaux which appeal in this mystical manner to the retrospective imagination, it cannot afford to be foolish.

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**The Commissioners on Technical Instruction** are now busily engaged in preparing their report, which promises to be a work of considerable magnitude. The completion of it will probably occupy more time than was originally contemplated.



## THE SOMERSET TYPE OF CHURCH.

A PAPER on the "Somerset Type of Church as compared with those of other Counties" was read by Mr. B. E. Ferrey at the annual meeting of the Somersetshire Archæological Society. In the course of it the writer said: Although, as the redoubtable Mrs. Malaprop has said, "comparisons are odorous," I have this evening ventured to have the courage of my opinions in defiance of that lady. In France, Spain, or Italy we are frequently whirled for two or three hundred miles through very flat country with little variety in the trees or crops, and much the same in the architecture, whereas in England there are great changes, even in a short journey of fifty miles. We must, first of all, examine below the surface of the ground, and then find that it is the geological formation which is the mainspring of the changes. Perhaps there is scarcely a single county in England that has greater variety of landscape than Somerset. Look at its most marked natural features—the great ranges of hills. There are the sterile, mountainous, and stony heights of Mendip, the lofty wild range of the Blagdon Hills, the soft-looking wooded Quantocks. Then there is another variety. The peculiar green molehills, island-like, thrown up amid the broad and not inconsiderable alluvial plains like those about Bridgwater, Glastonbury, and Langport; or another phase, the very undulating country, with incessant "ups and downs," in the vicinity of Bath, round Wincanton, and in the neighbourhood of Wiveliscombe.

Though there is some amount of soil in this county suitable for the manufacture of bricks and tiles, I am not aware of many mediæval examples remaining, for the very sufficient reason that admirable building stone of different kinds was always to be quarried bountifully in nearly every part. But at the present day the Bridgwater tiles, bricks, drain-pipes, and pottery have attained good reputation, as also those at Pool, near Wellington, manufactured, I believe, not longer ago than some ten or fifteen years, and those worked at Weston-super-Mare. If the ecclesiastical or other architecture of the different English counties is examined, it will, as a rule, be found, and very intelligibly too, that where the best building stones are available there is the best architectural type. Glancing at the far north, in Northumberland and Durham, we have the beautiful stone of which Durham Cathedral and Hexham church are built, and the splendid sandstone of Morpeth. Yorkshire possesses a grand array of building-stones (a rival to Somerset in that respect), different, however, in composition, as they are mainly sandstones and magnesian limestones, not oolites. There is the Benedictine Whitby Abbey, built of Whitby crag moonstone, much used in the county, and the glorious assemblage of abbeys principally of the Cistercian order, as well as many fine parish churches. Lincolnshire has its warm-coloured Ancaster stone, an oolite, besides an abundant supply in the neighbouring county of Nottinghamshire, with its remarkable group of limestones and sandstones at Mansfield. Derbyshire has its magnesian limestone at Bolsover, and the millstone grits. There is Northamptonshire, with the beautiful freestones of Barnack and Ketton, the possession of which must have encouraged the growth of the fine series of parish churches, generally crowned with spires. In Bedfordshire are also many fine churches built of the Totternhoe limestone—a beautiful fine-grained stone, and a material much used in the midland counties, but which, unfortunately, has not stood the test of weather, and is best employed internally. There is the Douling stone, used at Wells Cathedral and Glastonbury Abbey, a wonderfully durable material; Ham Hill, ruddy-looking in its youth, calm-looking and gray, covered with lovely-tinted lichens, in its old age; the red sandstone of Bishop's Lydeard and that neighbourhood; the sober-coloured blue lias, too often, alas! treacherously undurable if not properly selected; the excellent blue lias paving-stones and steps of Keinton, Street, and Pennant, the latter being quarried near Bristol. Again, there is the white lias, such as is found in the railway cutting between Wells and Shepton Mallet, resembling Caen stone in its white colour and texture. This is the stone employed in the sculpture of the arch mouldings to the west front of Wells Cathedral, instead of Douling. Last, not least, that rich purplish-red conglomerate, or pudding-stone, called Draycott, which will take a half-polish like marble, and the semi-freestone of Wedmore. Here certainly is a goodly list for one county.

The manner in which Mediæval churches were adapted to the soil (appearing to grow out of it) and to their surroundings is admirable. In chalk districts, such as a large portion of Hants, Wilts, or Sussex, it is the exception to see a richly ornamented building, with elaborate panelled parapets and pinnacled tower. In many parts we observe a wide expanse of open country, a kind of undulating table-land with few trees and hedges, the timber being confined to the hollows or combs where the streams run, or oftentimes surrounding the churchyards. From among the foliage peeps out the quaint unpretending fane in which our forefathers worshipped, the tower in these counties frequently with a plain, unpierced parapet, and a pyramidal tile-covered capping or gray oak-shingled spire. How widely different to this county, which, with all its lovely scenery, has no chalk in its borders, so that the picture of such a church as I have endeavoured to shadow forth to your minds would look curiously out of place.

The Dorsetshire churches approach the Somerset type in the bodies of the buildings, but in respect of the towers are certainly not so fine, though of the same great period—the Perpendicular. The low-pitched, lead-covered roof, with tie-beams filled in with rich tracery above, and the panelled parapets, are characteristic of both counties. Progressing still further west, the county of Devon is reached, where, as a general rule, the churches are smaller and less interesting. The grand tower also to a great extent disappears. But there are several points of similarity to this county. The waggon-headed ceiling, with its carved bosses; the richly-panelled or carved bench-ends, and the rood-screens, often painted. In freestones used in building Devon is not so rich as this county, either in extent or variety. Beer stone, of which Exeter Cathedral and many other fine buildings are constructed, is the most important. Granite is also used, and, naturally, has had the influence of making plain churches, while in the neighbourhood of Plymouth the celebrated marbles are quarried, which, however, have not had much effect on the architecture of the middle ages. In the north-west part of Somersetshire a peculiar type of small carved capital is seen, exceedingly like that of Devon, generally of late fifteenth or even sixteenth-century work. Sculptured figures of angels to each cardinal point of the capitals frequently occur, each bearing emblems of the Passion, or perhaps some musical instrument.

The Cornish churches have several points of resemblance to the Somerset, and here I must beg pardon if I repeat what has, no doubt, been said much better by others about its remarkable churches. Like the buildings of this county, earlier churches were cruciform, built of sandstone; the later ones, erected during the same period, when so many Somersetshire ones were commenced, are built of granite. In plan, the normal fifteenth-century Cornish church takes a considerable departure from this county, and is certainly monotonous. There span-roofed aisles of nearly equal width, prolonged from the west to the east (the latter walls frequently flush the whole width), constitute a plan not equal to the more usual Somersetshire type. Indeed the lead-covered aisle roof of low inclination, with parapet, affords more variety than the compass-shaped roofs with eaves of many of these Cornish churches. The nave and chancel being generally under an unbroken continuous roof, the effective feature of a chancel arch is wanting, though its place is to some extent supplied by an oak rood-screen. The roofs of the Cornish churches internally are not unlike a type of the Somersetshire, the collar-beam trusses, with curved braces under, and the waggon-headed ribbed and panelled ceiling. In some parts of Cornwall, the Mediæval architects seemed to have endeavoured to emulate their brethren here, regardless of the fact that they had to deal with a very different substance to the facile working stones of Somerset. At Launceston church and in the parish church of Truro, parts of which I believe are now being incorporated in the new cathedral, many granite blocks placed externally are carved in an extraordinary way with foliage, scarcely an atom of plain surface being left. The ornamentation cannot be called diapering, for although the same pattern is oft repeated, there are considerable minor variations in the design. I was much struck with this feature in Cornish architecture. In its external roof covering, Cornwall has a decided advantage over many other counties. It possesses a good durable slate of pleasing gray, or sometimes grayish-green hue, and of small sizes, so that the eye is not offended by the large cold blue Welsh slate. The Delabole slates attained their wide reputation years before the Welsh and Westmoreland slate became so much employed, and are much used at the present day. In consequence of some superstitions and its sunless aspect, the northern part of the churchyards, as we know, are usually devoid of graves. I must, however, mention an exception, in the case of Portishead church, where, I was informed, when examining the building a few years since, that the large number of graves on the north side were those of poor shipwrecked creatures whose bodies had been washed ashore.

Let me now endeavour to draw attention more particularly to the architecture of the county wherein we are assembled, still keeping in mind the title of my paper—a comparison. There can be nothing more beautiful and effective than the cruciform plan of many of the earlier churches before the great wave of the Perpendicular style swept over the country. We there see the pleasing contrast of light and shade caused by the projecting arms of the transept with the appropriate finish (at the intersection or the crossing) of the central tower, the almost invariable accompaniment in England of this form of church. However beautiful the later developments of the architecture of the fifteenth and sixteenth century may be, their forms cannot rival this cruciform plan. Sometimes we find the remains of the earlier plan enclosed and incorporated in a larger church of a later period. I have already mentioned the western gable turret so usual in the churches of North Wales and in several English counties, but which is very rare here. As far as I am aware it is generally met with only in the form of a sancte-bell cot over the east gable of the nave, as at Long Ashton church and several others visited by this society in 1881, where it appears to be a localism. The grand Somerset towers, with their characteristics, have been almost exhaustively treated of by Mr. E. A. Freeman and others.



Of the towers of distant counties, perhaps the Norfolk examples most nearly approach them with their pinnacles, though generally inferior in height and size, and of plainer detail. As Mr. Freeman has said, "The west and lateral towers in Somerset and Northamptonshire are rarely octagonal from the ground, almost always having a square portion. But," says he, "the square part in the former county is felt to be a mere base to the octagon, while in Northamptonshire the octagon is a mere finish to the square." This is happily put. They are certainly a feature in some parts of Somersetshire, anterior to the period of the great Perpendicular towers. In other counties they are quite the exception. Somerton, Barton St. David, and Weston-Bampfylde, near Sparkford, are good specimens of this type. As Mr. Freeman has admirably expressed it, speaking of the Northamptonshire spire and the Somerset tower, "The comparison, indeed, lies between the equal forms of beauty, the tower being the perfection of dignity and the spire the perfection of elegance." In this county I do not know a single instance of the gabled or saddle-back tower. The form is rare in England, though usual enough in the north of France, and the specimens are generally small and plain. I hear that they are sometimes found in the south of Northamptonshire and on the coast of Sussex. I know one or two examples in North Wales. The round form of tower also had no following in Mediæval Somerset. There are isolated examples in Essex and Berkshire, and of course there are many in Norfolk, as also in the neighbourhood of Lewes, which was connected with Castle Acre, Norfolk. The form will thus be accounted for, and is certainly suitable to a locality where freestone is scarce. In many of the towers the stair-turrets are a conspicuous decorative feature externally, giving variety to the general effect. In counties where there is little freestone, but where oak was abundant, as at Whitchurch church, Hampshire, the stair-turret is of that material, standing inside the tower just clear of the walls, and picturesquely treated, the enclosing framework being perforated and ornamentally cusped. While on the subject of turrets I may instance the lofty octagonal rood-stair turrets existing in this county, which are not so prevalent elsewhere, as well as the square-edged slightly projecting rood-turret, gabled at the top, as at Portishead church, the greater portion of the steps being in the thickness of the wall.

There are evidences in many a church of the former existence of rood-lofts and screens, numbers of them happily still standing. The splendid range of clerestories, two windows to each bay, so common in Norfolk, is very exceptional in this part of the world. There is a brilliant exception to this at Congresbury church. The perforated stone panelling to the bell-chamber windows of towers instead of oak louvres is a very charming and well-known feature of the Somerset churches, almost peculiar to them, though it is to be sometimes met with in Dorsetshire. Another characteristic of the fifteenth century here is the panelled arch and pier, scarcely ever occurring to the nave arcade, but very often to the tower or the chancel arch, sometimes to the arches separating the chancel from its chantry chapels. One of the best and boldest specimens in my experience is that to the tower arch at Evercrech church. The kind of vaulting, approaching to fan-tracery, in the ground storeys of towers and in porches is a characteristic. The pierced parapets are another peculiarity. The waggon-headed ceiling is common also to Devon and Cornwall. The trussed rafter roof, with curved braces and moulded purlins, is more prevalent in this county than any other; the tie-beam principals, with pierced ornamental panels, are found here and in Dorsetshire. The nearly flat ceiling, with massive moulded ribs, divided and subdivided into panels, with elaborate carving and enriched cusps, deeply recessed, is found to perfection in the nave aisles of Bruton church and Kilmersdon church, near Radstock, and is quite characteristic of Somersetshire. In the nave aisles of Yatton and South Petherton churches are responds, or attached columns, next the outer walls, carrying the roof trusses, a rare feature where there is no vaulting. In the window tracery I cannot say that either in the earlier or later style does Somerset hold any position very superior to other counties. Roofs of stone, forming the external roof and ceiling also, are uncommon in England, though more usual in Ireland and in Spain. There are examples at the porch, Leverington church, Norfolk, and at Barnock church, and a few others. Abbotsbury chapel is an instance in the neighbouring county of Dorset. The only instance I am aware of in Somerset is to an interesting chantry chapel or aisle to the north side of Limington church, near Ilchester, of the fifteenth century. Even in churches of the Decorated period there is no Somerset example that has the profuse ball-flower ornamentations to be found in parts of Herefordshire, at Leominster, and in Gloucestershire, which gives a very rich effect to the building. This characteristic ornament of the Decorated style appears there in the door and window-jambs, in the cornices, eaves courses, &c., studding them all. I have already contrasted the Somerset and Northamptonshire church, but for one moment would draw attention to the remarkable window in the interesting church of Oundle, in the latter county. It is of the Early Decorated period, very long and narrow—in fact, singularly un-English in its proportions (though in all other particulars English), more like German or French work. Its originator may have been abroad and brought back just a fleeting impression of foreign detail. Somersetshire is unusually rich, compared with

other counties, in Mediæval stone and wood pulpits, as might be expected from the preponderance of the churches built during the Perpendicular period. Some have the remains of the ancient colouring upon them, as at Cheddar. Stoups or benaturas are not infrequent, being either in the south porch or attached to the west doorway, if that was more used and nearer the town or village. In floor-brasses, Somerset and other western counties have to yield the palm to the east of England. It is one of the great advantages of the later churches that the wood-fittings are so complete. In a thirteenth-century building this is not the case. Screens, bench-ends, and such like adjuncts, which so warm up and brighten the fifteenth or sixteenth-century structure, are not present. There is, of course, considerable archaeological and historical interest in works of several dates in a church, but an architectural completeness in an entire building finished in one style, as in many Somerset churches. I have obviously but touched upon the fringe of the very small part of the large subject selected for this essay, but trust it will be sufficient to show the value of comparisons. I cannot better conclude than by quoting the beautiful words of St. Chrysostom, "The Church, the Home of the Angels, the Audience Chamber of God, and the Image of Heaven."

### THE HAWICK TOWN HALL COMPETITION.

THE following is the report submitted by Mr. Honeyman F.R.I.B.A., to the Council on the competitive plans:—

*To the Provost, Magistrates, and Town Council of Hawick.*

Gentlemen,—Having in compliance with your request carefully examined the competitive designs for the proposed new municipal buildings for the burgh, I beg to submit the following report:—

Designs have been received from twenty competitors, some of whom have sent alternative elevations and others alternative plans and elevations. Three have sent designs under the same motto—"Teviot"—and these have been distinguished as "Teviot" No. 1, No. 2, and No. 3.

In preparing these designs competitors have had to face two considerable difficulties, the one arising from the peculiarities of the site, and the other from the smallness of the sum to which by the conditions they were restricted, and the first of these has been much more successfully met than the last. The majority of the plans are good, and some show great skill and ingenuity in their arrangement, and marked ability in their architectural treatment; but on the other hand it is evident that the majority of the designs would greatly exceed the limit of cost. I am not prepared to say that any one of them could be carried out, with structural and architectural details suitable for such a building, for the sum named, 8,000*l.*, even if a liberal interpretation be put on the phrase "incidentals" in the fourth condition. Several competitors, however, nearly approach a margin of excess which might be regarded as permissible; and among these I may mention the authors of the designs having the mottoes "Teviot" (No. 3), "Branksome," "Teviot" (No. 1), "Teviot" (No. 2), "Delta," and "St. Cuthbert." Only one, however, has in my opinion succeeded in keeping within that margin, namely, the author of the design bearing the motto "A. B. C.," and as he has produced a very excellent design, fulfilling all the specified requirements with a completeness and convenience of arrangement unsurpassed by any of the others, and distinctly superior to most of them, I have no hesitation in awarding him the first place in the order of merit.

An admirable design has been submitted with the motto "Experto Crede," and the designs having the mottoes "Iona," "Municipal," "Teviot" (No. 3), and "Branksome" have also some excellent features; and it is with extreme regret that after most careful consideration, and under a deep, I may say painful, sense of my responsibility in the matter, I find myself compelled to recommend that these should be excluded from the competition. The designs having the mottoes "Nil Desperandum," "Utility," and "Fitness" violate another condition by occupying more than the prescribed extent of ground, and the author of "Eildon" has mistaken the slope, and arranged his buildings as if the High Street were at the highest point.

In these circumstances, the design with the motto "A. B. C." alone substantially fulfilling the conditions of the competition, I am unable to award the second and third premiums; and I cannot recommend the public exhibition of the designs.—I have the honour to be, gentlemen, your obedient servant,

JOHN HONEYMAN.

140 Bath Street, Glasgow: August 23, 1883.

**The Total Expenditure on Building Operations** in Winnipeg up to date this year—or during little more than half the building season—amounts to 359,870*l.* During the whole of 1881 the expenditure was less than 400,000*l.*, and during 1882 it was under 800,000*l.*



## CEMENT WORKS.

IN the inspections under the Alkali Works Regulation Act a good many difficulties have arisen as to the meaning of cement works, and it seems impossible to decide without some arbitrary line being drawn. The Act mentions aluminous deposits. Now, it is true that aluminous deposits of the Thames and other rivers were chiefly in the minds of the framers of the Act, and such deposits are no doubt offensive when burned. But a question has arisen, What is an aluminous deposit? Is common clay from a considerable depth, and of formation altogether out of historic time, to be included under this aluminous department? The officers say that the only conclusion to come to was that, if it gave out any burning and offensive smell, it ought to be included under the Act. Again, there is the case of lias limestone, which includes a considerable amount of alumina, and cements which contained from two or three to ten or twelve per cent. The practice has been to send for specimens of the stones or other material used, and to analyse them. Generally there has been more than one kind of limestone employed in the manufacture, and if any of these have given out on combustion any offensive vapours, sulphurous gases, or others, the chief inspector supposed them to be included under the Act. Dr. Angus Smith says he does not know a better way, and hopes it is considered a legal and proper method. There has been no rule framed with regard to the cement works, and it is the part of the inspector to obtain a rule by some method after experience. The provisional order in this case which Dr. Angus Smith would propose is this, that there should be no more cement works made with the low conical or open kiln; that after one or two years all at present in existence shall cease to exist. It is considered that this will get rid of a very large amount of offensive gases; also that the chimneys should not be less than 120 feet high. In some cases it may be advisable to increase this height, as, for example, when there is high ground in the neighbourhood. It may be also advisable to have power to insist on methods of diminishing the amount of visible matter in the vapour by increasing the space for depositing the solids; and if this were found insufficient, of insisting also on a certain amount of smoke-washing, a process gradually becoming more practicable. Dr. Angus Smith also suggests that no salt water shall be used in the mixing of lime and aluminous bodies, but whether this would be too great a hardship in some cases has not been ascertained. That there are other cases where such a rule ought to be stringent whenever the vapours from the works are so near habitations as to become very offensive, is said to be very certain. The study of some of these works is very difficult, because the visits take a long time.

The following regulations for cement works are recommended, but have not yet been adopted by the Local Government Board: Cement works of the old form—namely, short cones which pour out their smoke near to the ground—not to be allowed in any situation where reasonable objection can be taken. Every chimney used for the purposes of cement kilns to be at least 120 feet high. Circumstances may decide that chimneys must in some cases be higher—as when, for example, the ground rises near the factories and the smoke is apt to strike this ground readily. When the works are very large, and consequently the amount of smoke very great, a still higher chimney may be demanded for its removal. When the nuisance is found to be very great, it may be allowed to the appointed authority to insist on such a series of chambers for deposit of the solid matter of the smoke as will sufficiently diminish it. If the above methods still leave sufficient cause of complaint, it will be competent to the appointed authority to demand that the gases be washed to such an extent as may be considered requisite. Cement works not to be built until plans are approved of by the Local Government Board.

The materials used in making cement in the West of England are limestone or chalk, with clay or other aluminous deposits. They are ground together and burnt in kilns. In cases where the aluminous ingredient is mixed with organic matter, as in river mud, much unpleasant smell arises. Also, when either the limestone or the clay is bituminous, nuisance is created. The best palliative is found to be to pass the offensive smoke through chambers where it comes in contact with the wet material about in its turn to be burnt. To carry out this system the most useful form of apparatus is doubtless the Hofmann kiln.

In one of the large works in the North of England two systems of preparing the chalk and clay for cement making are in operation. One, the usual method, is by mixing the chalk and clay in a suitable mixer, in presence of an abundance of water. The watery mixture, or "slurry," is then run into large settling tanks, where the solid part subsides, whilst the water which collects at the top is run back again to the mixer and used over again with fresh quantities of chalk and clay. After remaining in the settlers for many weeks, and separating as much water as possible, the tenacious mud remaining is dried by means of the waste heat from the coke ovens used for preparing the fuel for the kilns. It then goes to the kiln and is burned. The other process differs more in detail than in principle. The mixing of the chalk and clay is performed in presence of water, but the water is reduced to a minimum. Enough water is added to confer on the "slurry"

fluid properties sufficient to enable its being pumped and transported in shutes and so forth. After being properly mixed, the "slurry" is run on to a horizontal drying floor, placed beside a kiln, the hot waste gases from which pass over the mixture, and afterwards pass up a chimney at the further end of the drying chamber. Each drying chamber is of a size sufficient to furnish a charge for the kiln in connection with it, and the waste heat from the kiln is enough to prepare the contents of the drying chamber for the burning process. Apart from financial considerations the latter method has something to recommend it. (1) The use of the waste heat from the kilns does away with the necessity of finding a cheap source of heat, and consequently there is not the same inducement to burn coke, an almost necessary adjunct to the older method. (2) The gases from the kiln passing through the drying chamber have time to deposit, and do deposit a portion of the solid particles they carry in suspension, and (3) by subsequently passing up a chimney the gases can be diffused and their disagreeable effects greatly modified. The opinions of manufacturers upon the two methods are both strong and conflicting. At Messrs. Johnston's works, in Gateshead, the latter process (which is patented by a member of the firm), is superseding the older one, though the old style is still in operation to some extent.

## THE NORFOLK AND NORWICH HOSPITAL.

THE new hospital which was opened on August 20 by the Duke and Duchess of Connaught is planned on the pavilion system. The style is an adaptation of the Queen Anne style to modern needs, the materials used being red brick and white stone dressings. The administrative block, which is in the centre, is an imposing pile of buildings, with a covered carriage-way at the entrance. The arms of the Prince of Wales (the Princess's being quartered with them) are borne on the stonework of this portion of the building. A cupola and tower, in which is a clock striking the hours, give a look of completeness to this block. The only connection the administrative section has with the pavilion on either side is by a corridor one storey high, with windows on both sides to secure a free circulation of air from front to back.

The administrative block consists of a basement and three storeys above. The basement contains a kitchen, a room 51 feet square, well lighted and ventilated, surrounded by the house-keeper's room, servant's hall, scullery, stores, &c.; a wide corridor runs east and west, and lifts are provided for sending the food to the patients, and for hoisting coals. On the ground-floor an entrance corridor 12 feet wide leads into a waiting hall about 40 feet square. On the right of the entrance are porter's room, the library, surgery, dresser's room, and dispensary. On the left are the secretary's room, the board-room, the matron's, and store-rooms. On the first floor are situated resident officers' sitting-rooms and bedrooms.

In the rear of the administrative block is the operating block, a one-storey building, consisting of an operating theatre, about 40 feet by 20 feet, well lighted, surrounded by six small wards for one and two patients; also with scullery, nurses' bedroom, bath, and lavatory; the whole approached from the main corridor, but sufficiently recessed from it to insure privacy and quiet.

The pavilions lie on the right and left of the administrative block, and communicate therewith by a lengthy, well-ventilated corridor, 10 feet wide. They are some 260 feet long and 29 feet wide, two storeys high (the centre being raised to form an attic storey), and with octagonal turrets at each of the four corners, in which are bath rooms, water closets, &c. Each wing is divided into large wards for twenty-four beds each, with nurses' rooms, ward sculleries; and there are also a number of smaller single wards. The ventilation is by large windows on each side and at the end of the wards; while communication with the turrets is only had by passing through a well-ventilated lobby. The upper storeys of the pavilions are approached by a spacious central staircase, abundantly lighted and ventilated. Each floor thus forms by itself, for all practical purposes, a separate hospital. For the special treatment of children's cases, two wards, one of thirteen beds and the other of four beds, have been provided in the north-east pavilion. In the rear of the new buildings, and on the city side of the area, a new chapel in the Gothic style is provided.

The out-patients' department is now most amply provided for. The block reserved from the old hospital has on the ground floor separate rooms for three physicians, and the two assistant surgeons. On the same floor, but at the further part of the block, is the museum, containing a large collection of rare pathological specimens and cabinets of the calculi removed from patients in the hospital, numbering over 1,100. At the extreme end of the block most distant from the out-patients' department are four wards for infectious cases. In the upper floor of the block are the nurses' dormitories, bath-rooms, &c. The wash-houses and laundry are fitted up with a powerful steam-engine, boilers, washing machinery of the most perfect character, and hot-air chambers for drying linen. A disinfecting chamber which may be heated to any required temperature is also provided. The heating of the whole building is done by open fires in the wards and principal rooms,



supplemented by hot-water coils and pipes, and all the corridors are heated by hot-water coils. A hot and cold water service is laid over the hospital, two sets of boilers being fixed in a central position, so arranged that each or either can be used together or separately for the whole hospital. The building is also fitted with speaking tubes and electric bells. Special arrangements are made for ventilating the pavilions and operating block. The wards and over-kitchen are built on the fireproof principle, with iron girders and concrete; hydrants are, however, fixed in suitable positions inside and outside the establishment. All the cooking is arranged to be done by gas, as it is believed that that system is more economical, cleanly, and effectual than cooking by coal fires.

The architects whose plans were adopted were Messrs. Boardman and Wyatt. Mr. Wyatt, however, died soon after the work had been begun, and the carrying out of the whole has, therefore, been under the direction of Mr. Boardman. The contractors were Messrs. J. W. Lacey & Co.

### THE LATE MR. WILLIAM GODWIN.

MR. WILLIAM GODWIN, of Lugwardine, the proprietor of the well-known encaustic tile works, died on Tuesday evening in last week. The *Hereford Times* says that Mr. Godwin was born on January 3, 1813, in Bearwell, Leicestershire, soon afterwards removing into Gloucestershire with his parents. His early life was passed in the brickfields on the banks of the Severn, and his career then and subsequently is an example of success attending honest, straightforward perseverance. Such was his conscientious zeal and enterprise in every progressive grade, that immediately on the close of his apprenticeship his services were secured as manager of an adjacent brickworks. Here he remained for a short period, when some of the chief of the engineering party for the Severn Navigation Company who were on the river noticed the superior manner in which the goods were made under his management. A little conversation ensued, and resulted in his being offered the charge of a new undertaking of the same kind at Ledbury, which position he accepted and held for several years. Family cares, however, increasing, led him to seek something on his own account, and he went to Lugwardine, still pursuing the same work. Here he eventually so expanded and developed the resources at his command that he was able to say at the finish of the laying of the tile pavement in Gloucester Cathedral, "I made and carried—i.e., assisted to load, navigate, and unload many of the bricks that were used to build some of the early warehouses in Gloucester Docks, and now I have completed the tiling in the choir of this noble cathedral." And he also said, "In the meantime I have seen a little of Gloucester's rise and progress." The encaustic tile work was carried on at Lugwardine in combination with the brickmaking until about twenty years ago, when all the finer processes of the encaustic tile manufacture were removed to his new extensive works at Withington. "Godwin's Encaustic Tiles" have now for many years been famous throughout the civilised world, and Mr. William Godwin has been distinguished, and deservedly so, as the producer of ecclesiastical art treasures of the highest excellence and beauty. Llewellyn Jewitt, F.S.A., in "Ceramic Art in Great Britain," says, referring to Mr. Godwin's tiles: "His tiles are exact reproductions, not designs modernised, and this it is that gives to floors laid by him that peculiar charm which they undoubtedly possess. In addition to actual copies of old tiles, Mr. Godwin has produced a large variety of new designs, in which the patterns are characterised by pure mediæval feeling, and by excellent workmanship. The tiles are of extremely hard and durable quality, and the colours clear, distinct, and good." Such complimentary notices of his productions were numerous. Not only in Gloucester Cathedral, but in the cathedrals of Worcester, Salisbury, Hereford, Rochester, Edinburgh, St. Asaph's, St. David's (Exeter), Manchester, Carlisle, Chichester, Christchurch, and Armdale (New South Wales), and a vast number of other churches and important public buildings, were Mr. Godwin's tiles largely used to beautify the pavements, &c. As a thoughtful, far-seeing man, with good practical judgment in business concerns, Mr. Godwin was often called upon to arbitrate in disputed matters. Mr. Godwin was for some time the guardian for the parish of Lugwardine, this being, we believe, the only public office he ever held.

The life of Mr. Godwin affords a very pleasing example of steady, persevering labour and enterprise crowned with success. It is divulging no secret to say that the encaustic tile works at Withington have been a very prosperous concern, and that Mr. Godwin had amassed a considerable fortune as the result of the world-wide trade secured by the excellence of his products. What made him so much esteemed, however, was that in the midst of his growing prosperity the kindly, generous qualities which had distinguished him in his younger days remained unimpaired. He preserved to the last a warm and benevolent disposition, unmarred by anything in the nature of ostentation; and he leaves behind him the memory of a truly Christian character, which won for him the esteem of all who knew him. A short time prior to his death

he took into partnership his eldest son, Mr. William Godwin, who has, indeed, exercised entire control of the business for some years past, during his father's declining days, and who, it is well known, inherits all his father's estimable qualities. Mr. Wm. Godwin is therefore now, we presume, at the head of the flourishing establishment.

### REVIEWS.

MODERN PERSPECTIVE. A Treatise upon the Principles and Practice of Plane and Cylindrical Perspective. By Professor W. R. WARE. (Boston, U.S.: J. R. Osgood & Co. London: Trübner & Co.)

It has been remarked by De Quincey, as a curious mental phenomenon, that a man who had never been taught drawing, if asked for a sketch of a solid object, would be certain to ignore the fact that some of his lines must converge, although he might be able to give a suggestive notion of one of the faces of the object. What is more remarkable is the occurrence of some skill in drawing without the power of accurately representing the relation of the parts of an object, or of different objects, to one another in respect to distance. The Chinese, for example, seem to have a peculiar mental twist (unless they act in obedience to conventional canons which cannot be disregarded), through which the relative proportions of objects are different to what they appear to be in the eyes of an European artist. When we see the interest that was attached to perspective representations by the Pompeian decorators, who considered it to be a feat to show a picture hanging inclined from a wall or a door ajar, it is evident they knew that very great power in painting natural forms is not sufficient to enable an artist to suggest the effect of distance. The stories that are recorded of the fear of some of the early Italian painters that their perspective dodges might become generally known, is also evidence that even a genius finds a difficulty in dealing with a vanishing point. Does not every exhibition of paintings also demonstrate that for many artists perspective still remains a mystery?

It is not difficult to explain how it happens that so few artists have mastered perspective. Whether it is taught by a mathematician or empirically a scientific form has to be given to its propositions, and at all times art and science have been supposed to be in opposition. But in this case science cannot be evaded. There is no royal road to perspective, and if students wish to gain possession of it they must patiently travel step by step along the route.

The book on perspective by the Professor of Architecture in Columbia College is evidently the work of a man who is aware of the difficulties that are somehow inseparable from the teaching of perspective, whether in classes or to pupils singly. Students who will go through courses of pure mathematics without raising a question as to the procedure expect to gain a knowledge of perspective without any strain on their comprehension. Professor Ware goes some way towards assisting students of that class by his ample explanations; but he also adopts a more scientific form, and his series of problems, definitions, and axioms are almost Euclidean in their systematic arrangement. There is no better way to impress the truths of the science on the mind. The illustrations, which are in a separate atlas, are also adapted to the requirements of various classes of students, and range from simple diagrams to elaborate views of buildings. The work is, in fact, far more complete than any of the treatises on the subject which have been published in this country, and our English professors will find it no easy task to produce one that will be equally useful to painters and architects.

ACCENTED FIVE-FIGURE LOGARITHMS, OF NUMBERS FROM 1 TO 99,999, WITHOUT DIFFERENCES. By LEWIS D'A. JACKSON. (W. H. Allen & Co.)

This is another of the ingenious books of tables which have been compiled by Mr. Jackson for the purpose of facilitating calculations. The system adopted is that of marking in five-figure logarithms the final figures with dashes or dots, according as they are strong or weak, or, in other words, according as the final figure is to be treated as if it were larger or smaller. Thus, for example, to take a very simple case, the log. of 175 would be, if a six-figure table were used, 2.243038; but an approximate result may be obtained in a shorter time by a five-figure table, the log. becoming 2.24304. The last digit is hardly correct, and in a series of calculations the adoption of it might lead to inconvenience. A sort of give-and-take rule is employed, which is not, however, always satisfactory. Mr. Jackson's book indicates the character of the final digit, and in the case we have selected a dash shows that the mean value of the 304 is somewhat less, and allowance must accordingly be made in employing the logarithm. The advantage of the method is that five figures can be made, without any additional trouble, to answer as well as six or seven figures. The tables, which include sines, tangents, &c., have been clearly printed, and, from their convenience, they are likely to supersede the ordinary tables, unless in cases where time is of no importance. In the Neperian logarithms there are eight figures besides the



characteristic; in the common system the number was a little diminished, and it was reserved for Vlacq and De Lalonde to make five figures answer. As the latter said, "Les architectes ont un besoin continuel des petites tables, bien plus rarement des grandes." Mr. Jackson has contrived to go a step further, by giving unvarying certainty to the five-figure system.

## ENGINEERING WORKS.

**The Mersey Dock Estate.**—The annual report of Mr. G. F. Lyster, engineer to the Mersey Docks and Harbour Board, shows that during the year ending July 1 a total of 513,493*l.* 19*s.* has been expended in his department upon dock works and maintenance on the Liverpool and Birkenhead sides of the river. The total expenditure upon dock extension at the north end of the city, under the Act of Parliament obtained for that purpose, now reaches 2,396,751*l.*, while at the south end there has been expended in similar works 598,099*l.* This, however, represents but a small portion of the work yet to be done, as a scheme for the deepening of existing docks and the construction of others has only recently commenced. At the meeting of the Dock Board a recommendation of a novel kind was presented, being to approve of a plan for pumping water into certain graving docks to a height considerably above the river level. By this means, it was stated, an adequate depth of water would be secured to float the largest steamers entering the port. The cost is estimated to be 26,000*l.*, and the project for pumping water into the docks is recommended in preference to the alternative method of deepening the docks themselves, inasmuch as the latter would involve a cost of 50,000*l.*, and would moreover prevent the use of the docks during the progress of the works. In the course of the discussion upon the matter, it was mentioned that Messrs. Glynn & Co., of London, whose tender for erecting the pumping machinery it was proposed to accept, were the constructors of the pumping works at Ferrara, Northern Italy, for the purpose of draining the marshes, and that the power of the pumps was so great as to raise a body of water capable of filling a basin of a square mile in extent to the depth of 3 feet in twenty-four hours. In the case of the Liverpool graving docks, it was estimated that the proposed machinery would raise the water 3 feet in an hour and a half. The matter was postponed for a fortnight.

**The Mersey Tunnel.**—Since the report presented to the annual meeting of shareholders the progress made towards the completion of the tunnel has been very satisfactory. Colonel Beaumont's boring machine has passed the very hard stratum of rock which for some weeks retarded its progress, and is at work upon a variety of the sandstone more easily dealt with. In the last fortnight 67 yards have been excavated, leaving 683 yards still to be passed through before the extremities of the two headings are united. At the present rate this would be accomplished in 20 or 21 weeks. In all other respects the undertaking is progressing equally well. Having driven an adit on the level of the floor of the tunnel in advance of the excavation of the whole section, and then making a chamber at the end of the adit, the contractor is enabled to work on from that point, just getting four faces to work upon—two on the Liverpool and two on the Birkenhead side. All these four faces are under the full tidal flow of the Mersey, far beyond the landing-stage on either side, but the drainage headings, one of which is being driven by the boring machine, are in advance of the main tunnel.

## CHURCH BUILDING AND RESTORATION.

**Halifax.**—The annual accounts of the churchwardens of Halifax parish church include those for restoration since 1877. The total cost, all of which is defrayed, was 19,605*l.* 14*s.* 5*d.*; the chief account being that of the builder, Mr. John Thompson, of Peterborough, for 13,200*l.* The organ alterations cost 1,783*l.*, and the amount paid to the executors of the late Sir G. G. Scott, the architect, was 830*l.*

**Great Grimsby.**—The new Roman Catholic church of St. Mary-by-the-Sea, at Holme Hill, was lately opened. It has been erected at the cost of Mr. T. A. Young, K.S.G. The plan comprises a nave and aisles, a chancel of ample proportions, and convenient sacristies, with good access to the presbytery, erected some years ago on the south side. At the end of the north aisle is a small apsidal chantry chapel and altar, dedicated to the Sacred Heart, in front of which a vault has been prepared for the founder. The organ is placed in a tribune on the south side of the chancel over the choir sacristy, with a projecting balcony and lattice to screen the singers—a familiar feature in Italian churches. The following are the dimensions of the church as at present completed: Chancel 40 feet long by 27 feet wide, and 50 feet high to the top of the panelled ceiling of the roof, and lighted by side windows the sills of which are 20 feet above the floor, the altar platform being raised nine steps, while the large east window of five lights is raised 25 feet above the nave level, with grand effect. This arrangement was devised to fit the altar and reredos, which are in accord with

the surroundings, and call for special notice. The altar, a fine slab of Hopton Wood marble, is 10 feet long, supported on a subbase of delicately veined alabaster and Derbyshire fossil marble pillars. The tabernacle is of alabaster, with engraved, enamelled, and gilded metal doors, which have been executed by Messrs. Richardson, Ellson & Co., from the designs of Mr. J. F. Bentley. There is a marble pedestal behind for the crucifix, and to the rear a throne of alabaster and Irish marble for the monstrance during the rite of benediction. Above is a lofty canopy, 21 feet high, with an open spirelet and statuettes of angels carved in Gloucester stone, and richly gilded. It is approached by staircases immediately behind, and detached from the eastern wall as required by the rubric, the wall itself being panelled with a carefully-designed arcade of stonework, carrying in the centre a retable or reredos of woodwork, rising to the height of 25 feet, and above it the great east window forms an important finish to the whole composition, and is to be treated as a "Jesse" window. The reredos will be gilded and filled with a series of paintings by Mr. Westlake. The stone and marble-work have been executed by Mr. Boulton, of Cheltenham; the wood reredos by Messrs. J. Tomlinson & Sons, of Leeds, from the designs of Mr. Chas. Hadfield, the paintings being by Mr. Westlake. The nave of four bays is at present 64 feet long and 34 feet wide, including the pillars, and 50 feet high, the aisles being the same length and 8 feet wide. The design, as laid out by the architects, embraces a further extension of three bays, including a massive tower and slate spire 200 feet high, with entrance porch, and baptistry, and south porch, forming an effective west front, facing Heneage Street and the Board schools. It has been the aim of the architects to express the idea of size and solidity, as in the great North-German Mediæval churches, and the material of which the fabric is constructed is a local brick of warm red tone, with a sparing use of Yorkshire stone. The nave and aisles are under one roof, and the junction with the chancel is marked externally by a lofty *flèche* or spirelet, covered with lead and Westmoreland slates, rising 50 feet above the ridge, in which hangs a bell of about one ton weight. The architects of the building are Messrs. Hadfield & Son, of Sheffield; the contractors for the church being Messrs. Riggall & Hewins; and for the sacristy, &c., Mr. J. G. Smith, both of Great Grimsby.

**Wesleyan Chapel Building.**—The minutes of the Primitive Methodist Conference show that there are 4,200 Connexional chapels, valued at 2,807,719*l.*, with an annual income of 254,252*l.* They provide accommodation for 893,679 persons. In 1882 there were 91 new chapels built, at a cost of over 84,000*l.*, and providing sittings for 22,000 hearers. Besides the chapels there are 1,542 other places where regular religious services are held.

**Lochgillhead.**—The Free Church, which was built to replace the old wooden structure, has been opened. It was erected from the designs of Messrs. Campbell Douglas & Sellars, architects, Glasgow, the contractors being Messrs. D. & J. McKellar, of Lochgillhead. The church is small in size, being 53 feet long by 30 feet wide inside. The front gable has a Gothic window of three lights, and at the other end there is a rose window filled with stained glass, painted by Messrs. Adam & Small, of Glasgow. The side walls are 14 feet high from the floor, and the roof is partly open, giving a clear height of 26 feet to the ceiling. On the south side is a porch surmounted by a small slated spire. At the back of the church is a large room to serve as vestry and session-house. The accommodation provided is now for about 260.

## NEW BUILDINGS.

**Convalescent Home, Felixstowe.**—A new wing for male patients is to be added to the existing home. The buildings will consist of a basement, in which will be a smoking-room for men, spacious kitchens, storerooms, and other servants' offices. On the ground-floor the matron's sitting-room will occupy a central position between the old building and the new, with connecting corridor at the back. The men's sitting-room and dining-room will run right through from front to back. A sitting-room, connected by a lift with the kitchen, will supply the dining-rooms, and it is so placed as to be equally accessible from either wing. On the first and second floors will be four dormitories (two on a floor), with lavatories, bath-rooms, and other conveniences to each. The matron's bedroom will be on the first floor, with servants' bedrooms above it. All the rooms will be of good height, well lighted and ventilated. The walls will be carefully constructed so as to exclude the damp. There will be verandahs to ground and first floors, running the whole length of the new south front, and 6 feet in width. The building will be faced with red brick up to the first floor, and studwork above this, weather-tiled on the outside. The east front will be broken up by two large chimney-stacks, corbelled out to stop the tiling of gables above, whilst two overhanging dormers, constructed of half timber-work and brick-nogged, will give an effective sky-line to the south elevation. The roofs will be plain tiled. The drainage will have careful consideration, and will be remodelled. The lavatory, bath-fittings, &c., will be of the most approved sanitary description. The old building will be



altered and improved in some important particulars, which will render it much more spacious and convenient. The sea-baths will be placed in the old basement, where there will also be a children's playroom, dispensary, &c. The estimated cost of the new works is 2,350/. Mr. E. F. Bishopp, of Ipswich, is the architect.

**New Offices, Birmingham.**—A large block of buildings for offices will shortly be completed in Corporation Street. It will be the Lincoln's Inn of Birmingham. The site has a frontage of 145 feet, and is 125 feet deep. The building is four storeys high, and is in the French Renaissance style. The offices have been arranged in suites around a court, each having a separate entrance and strong-room. On the ground floor are ten shops. There is also a large room, measuring 48 feet by 42 feet, which may be used for auctions, and in connection with it is a store-room, 37 feet by 17 feet. The cost of the building, which is being built for Mr. Alfred Humpage by Messrs. Horsley Bros., under the direction of Mr. W. H. Ward, architect, will be about 21,000/.

**Free Library, Dunfermline.**—This building, which owes its origin to the liberality of Mr. Andrew Carnegie, of New York, was opened on Wednesday last. It adjoins the St. Margaret Halls, and has frontages both to St. Margaret and Abbot Streets. On the Abbot Street side are situated, on the ground-floor, reading-rooms for ladies and gentlemen; while on the floor above, the library is located. This front measures 82 feet in length, and is two storeys high, with ranges of square-headed windows having single mullions, and in the upper range attached columns with carved capitals. A moulded string-course runs along the centre of the greater part of this front, and the wall is surmounted with a plain-moulded cornice. The principal entrance is near to the centre of the elevation, which at this point is treated so as to secure the appearance of a square tower, carried a storey higher than the rest of the building. Above the doorway is a scroll with carved foliage, on which the name of the institution—"The Carnegie Free Library"—is cut, beneath a representation of the rising sun. The St. Margaret Street front is somewhat similar in design, and extends to 70 feet in length. On the ground-floor here is a dwelling-house for the keeper, and, above, a large recreation-room. The front is divided by string-courses, which form hoods to the windows, while in the centre is an octagonal tower rising to the height of 68 feet, covered with a slated spire, which terminates in an elaborate iron finial, carrying the cardinal points. The library-room measures 57 feet by 25, the recreation room 26 feet by 25, the gentlemen's reading-room 34 by 25, and the ladies' reading-room 22 by 18. The library-room has an open timber roof of ornate character, the centre of the ceiling being 23 feet 6 inches from the floor. A spacious stone staircase gives access from the hall to the library and other rooms. The architect of the building is Mr. J. C. Walker, of Edinburgh.

**Coffee Palace, Birmingham.**—The new shops and offices in Corporation Street, which have been erected for the Birmingham Coffee House Company, were opened on Wednesday last by Mr. John Bright, M.P. The buildings were designed by Mr. William Doubleday, architect, of Birmingham, and are of a French Gothic type. Towards Corporation Street the frontage is 60 feet, and the height to the eaves is about 60 feet, the turret rising to 120 feet. The material of the front is Corsham Down stone, with Portland stone for weight-bearing lintels and corbels, and was executed by Messrs. J. Miller, Carr & Co. The columns and piers of the ground-floor are of polished red and gray granite, by Messrs. Jas. Wright & Sons, of Aberdeen. Mr. John Smith was the carver. The internal work was designed by Mr. J. P. Osborne. The general contractor was Mr. James Moffat.

**Offices for the Lancashire and Yorkshire Railway.**—The Lancashire and Yorkshire Railway Company are about to erect a large block of buildings at the Victoria Station, Manchester. At the same time important improvements in their existing offices will be effected, so that the old and new buildings will form a complete block of offices that will fully meet the requirements of the whole of the departments. In the present building this cannot be done, and the inconvenient necessity of renting offices away from the official centre has for some time existed. The new buildings will be in the Classic style, and will harmonise with the existing building. Designs have been prepared by Mr. William Dawes, of Manchester, who has been appointed by the directors architect to carry out the work.

**Victoria Restaurant, Manchester.**—One of the principal features in connection with the hotel portion of the Victoria Buildings, Manchester (a magnificent block which has already cost over 120,000/), is the grand billiard saloon in the basement. This splendid "cellar" has been cut out of the solid rock, and is one of the finest underground rooms in existence. The design is of massive proportions, and is rich in ornament and coloured decoration. It was originally intended for a billiard saloon only, as is seen from an illustration in *The Architect* some years ago, but the new proprietor has decided to devote it to restaurant purposes. To meet this new requirement considerable alterations have had to be made, involving an outlay of between 1,000/ and 2,000/. The works are being carried out by Mr. William Dawes, the architect of the whole building, from whose design the new hotel forming part of the block is being erected, at a cost of over 50,000/.

## SCHOOL BUILDINGS.

**St. Paul's Schools, Blackburn.**—These schools were re-opened on Saturday last after undergoing extensive additions. The extension provides on the ground floor a girl's school-room and class-room. On the upper floor the old school has been extended. There are two class-rooms divided by revolving-shutters, and also a young men's room with raised platform, the roof of which is open-timbered. The additional accommodation is for 411 scholars, exclusive of the young men's room, and the cost has been about 1,500/. The work has been carried out from the designs and under the superintendence of Mr. William S. Varley, F.R.I.B.A., architect, Blackburn.

## GENERAL.

**The Centenary** of the birth of the German painter Peter Cornelius is to be commemorated by a festival organised by the Berlin artists.

**Signor Fontana** has completed full-size figures in marble of the Queen and the Prince of Wales, and a typical figure of New South Wales. They are intended to be placed in the Government offices at Sydney.

**The Trial Cartoons**, showing the proposed decoration of two bays in the dome of St. Paul's, will shortly be placed in their positions. They are by Mr. Poynter, R.A., and Mr. Stannus.

**Sir Rupert Kettle** will preside in the Art Department at the forthcoming congress of the Social Science Association at Huddersfield.

**Mr. C. N. Tripp**, architect, died at Gloucester on Saturday, in his thirty-eighth year.

**Mr. Ernest Day, of Worcester**, has been appointed architect for the church which is to be erected at Rainbow Hill, Worcester.

**M. Charles Garnier**, the architect of the Paris Opera House, has been elected a member of the Société des Gens de Lettres.

**A Post Office** is to be erected on the Quayside, Newcastle-on-Tyne, from designs by Mr. Parsons. The contract has been taken by Mr. Walter Scott. The telegraphing department will be on a large scale.

**A Chapel for the Maidstone Union** is to be erected from the designs of Mr. H. A. Cheere, of Bagshot.

**The late Dean Boyd** has bequeathed 1,000/ towards the restoration of Exeter Cathedral and the restoration or enlargement of the library.

**The Foundation-stone of the Glasgow Municipal Buildings** is to be laid by the Lord Provost early in October.

**Mr. William Eve** has revalued the town of Reading. The ratable value has been increased by 40,662/, the old valuation list having stood at 176,756/, as against 217,418/ on the new list. The chief increase is upon the larger properties in the town, such as the gasworks, factories, railways, large shops, &c., some of these having been doubled in value.

**The Hohe Linie Inn** at Erfurt has been adorned by tablets which record that the following persons have resided in the house: 1341, Duke Christian of Brunswick, Archbishop of Bremen; 1541, Landgrave Philipp of Hesse; 1543, Duke Maurice of Saxe; 1543, Dr. Martin Luther; 1631, Gustavus Adolphus, King of Sweden; 1817, Frederick William, King of Prussia.

**A Station** is in course of erection on the South-Eastern line at Lower Nutfield, near Redhill, where Mr. H. Edwards, M.P., is laying out an extensive building estate.

**The Firm of Mintons**, of Stoke-on-Trent, is about to be formed into a limited liability company. The members of the firm—Messrs. C. M. Campbell, T. W. Minton, and Herbert Minton—will continue their connection with the concern, and will be joined under the new arrangement by several gentlemen who have been for long periods in the service of the firm.

**Mr. J. Campbell Walker**, of Edinburgh, has obtained the first prize in the competition for the Hawick town hall. There were twenty competitors.

**The Carving in Alto-relievo**, which is supposed to have been the work of Albert Durer, is now exhibiting in one of the northern galleries of the British Museum. The subject is *The Birth of St. John the Baptist*. The material used is Pappenheim hone stone. This carving was bequeathed to the nation by the late R. Payne Knight.

**The Ventilators** for the Dudley Free Library are being supplied by Messrs. C. Kite & Co., of Chalton Street, London, N.W.

**The Technical Schools** in connection with the Nottingham University College will, it is expected, be ready for opening in October. The college authorities intend to give a complete course of instruction in mechanical and electrical engineering, and in the sciences most closely connected therewith; while artisans will be instructed in mechanics and in the history and details of the machinery employed in the staple industries of the town.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, SEPTEMBER 1, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

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*To prevent the possibility of delay, and to enable the Post Office Order to be the more readily traced in the event of its miscarriage in transit, it is advisable in all cases to notify per following mail, the number, date, and location of the order.*

### COMPETITIONS OPEN.

BRISBANE.—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

OLDHAM.—Oct. 1.—Plans for Schools for the Union, to Accommodate 120 Boys, 120 Girls, and 60 Infants. The building to be a separate one, in an enclosed area, to contain three schoolrooms, dormitories, baths, kitchen, with cooking arrangements; dining-hall to hold 500 persons, to be arranged so as to be usable for religious service; and four sitting-rooms and four bedrooms for officers. Mr. J. W. Mellor, Oldham, Clerk to the Board.

### CONTRACTS OPEN.

ABERDEEN.—Sept. 1.—For Erection of Sheds at Waterloo Quay, for the Harbour Commissioners. Mr. William Smith, Engineer.

BALLYWATER HARBOUR.—Sept. 5.—For Building Stone Beacon on Sculmartin Rock. The Secretary, Irish Lights Offices, Dublin.

BATLEY.—Sept. 3.—For Additions to the Grammar School. Mr. Walter Hanstock, A.R.I.B.A., Architect, Bramley.

BECKENHAM.—Sept. 3.—For Additions to Stables and Buildings at the Old Manor House. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

BEDFORD.—Sept. 3.—For Erection of a new Bridge over the River Ouse, according to Plans by Mr. J. J. Webster, C.E. Contract No. 1. Masonry, Brickwork, and Earthwork in Approaches, Abutments, Piers, Retaining Walls, &c. Contract No. 2. Ironwork of Superstructure. Mr. T. S. Porter, Clerk to the Authority, Corn Exchange, Bedford.

BELFAST.—Sept. 10.—For Erection of Orange Hall in Clifton Street, according to plans by Mr. W. Batt, Architect, 4 Wallington Place.

BUENOS AYRES.—Sept. 17.—For Delivery for Shipment of about 1,400 tons of Wrought and Cast-Iron Work in Floor Plates, Manhole Frames and Covers, Roofs, Doors and Window Frames, Girders, Rolled Joists, &c., according to Specification by Mr. J. F. Bateman, C.E. The Argentine Minister, London.

BURY.—Sept. 3.—For Erection of School Chapel in Russell Street, Walmersley Road. Mr. W. Walker, Architect, 3 Fleet Street.

CAMBORNE.—Sept. 1.—For Building Mission Room and House. Rev. W. P. Chappel, Rectory, Camborne.

CARLOW.—Sept. 10.—For Chancel to Staplestown Church. Mr. J. F. Fuller, Architect, 179 Great Brunswick Street, Dublin.

CASTLEFORD (YORKS).—Sept. 1.—For Erection of two Schools and other Works, for the Featherstone School Board. Mr. F. W. Bradley, Clerk, Castleford.

CHELTEMHAM.—Sept. 8.—For Wrought-Iron Footbridge, 135 feet long; 66 tons of Cast-Iron Columns and Girders, Gratings, Rolled Joists, for Extension of Waterworks according to Specifications by Mr. J. F. Bateman, C.E. Mr. E. T. Brydges, Town Clerk, Cheltenham.

CHIPPING WYCOMBE.—Sept. 7.—For Additions and Alterations to the West End Infant Board School. Mr. W. T. Pycraft, Clerk to the Board, High Wycombe.

CORK.—Sept. 5.—For Rebuilding Premises in King Street for Messrs. Dobbin, Ogilvie & Co. Messrs. H. & A. Hill, Architects, 22 Georges Street, Cork.

CREWE.—Sept. 8.—For Erection of a Church at Crewe according to Plans by Messrs. Paley & Austin, Architects, Lancaster. Tenders to be sent to the Architects.

DUBLIN.—Sept. 4.—For Alterations and Repairs to Church of St. Nicholas Without and St. Luke. Mr. William Sterling, Architect, 107 Stephen's Green, W.

DUBLIN.—Sept. 7.—For Rebuilding Billiard Rooms in Crampton Court. Mr. William Sterling, Architect, 107 Stephen's Green, W.

DURHAM.—Sept. 7.—For Erection of Infant Board School in Giles Street, according to Plans by Mr. O. Hodgson Fowler, Architect, The College, Durham. Mr. R. Peele, Clerk to the Board.

EDINBURGH.—Sept. 3.—For Erection of a New Glebe House. Mr. W. I. Chambers, Architect, 5 Westmoreland Street, Dublin.

EDINBURGH.—Sept. 10.—For Construction of Wet Dock. Messrs. Blyth & Cunningham, C.E., 135 George Street, Edinburgh.

ELLAND.—Sept. 8.—For Additions and Alterations to Woodside Mill. Messrs. Horsfall & Williams, Architects, Halifax.

FEATHERSTONE.—Sept. 1.—For Building Two Schools, School-house, &c. Mr. Frank W. Bradley, Solicitor, Castleford.

FENTON (STAFFS).—Sept. 11.—For Erection of Buildings at Gasworks according to Plans by Messrs. G. W. Stevenson & Son, Westminster. Mr. C. Adderley, Public Offices, Fenton.

GUERNSEY.—Sept. 15.—For Erection of a Terrace of eight Houses, for the Real Property Trust. Mr. J. C. Torode, Secretary, Guernsey.

HINCKLEY.—Sept. 7.—For Formation of New Roads, Construction of Drains, Well, &c., for the Directors of the Manor Industrial Loan Society. Mr. Arthur Pickering, Secretary.

KING'S LYNN.—Sept. 4.—For Erection of New Hanley Library. Messrs. Adams & Son, Architects. Mr. T. G. Archer, Town Clerk.

LEICESTER.—Sept. 4.—For Widening and Deepening the River Soar. Mr. J. Gordon, C.E., Borough Surveyor, Town Hall, Leicester.

LEITH.—Sept. 5.—For Construction of Goods Shed, measuring 196 feet by 79 feet, at the Edinburgh Dock. Mr. John Torry, 13 Heriot Row, Edinburgh.

LLANDILO GRABAN.—Sept. 14.—For Rebuilding Moriah Baptist Chapel according to plans by Mr. George Morgan, 24 King Street, Carmarthen. Rev. D. Powell, Painscastle.

LONDON, E.—Sept. 5.—For Erection of Additional Accommodation for the Indoor Poor and Casual Poor of the Parish of St. Leonard, Shoreditch, according to Plans by Messrs. Lee & Smith. Mr. Robert Clay, Clerk to the Guardians.

MIDDLESBROUGH.—Sept. 8.—For Construction of Hury Reservoir. Mr. Mansergh, 3 Westminster Chambers, Victoria Street, S.W.

MORLEY.—Sept. 7.—For Cemetery Chapels, Lodge Gates, and Walls, for Morley Burial Board. Mr. J. Sykes, Architect, Queen Street, Morley. Mr. E. Buller, Clerk of the Board.

NEWHAVEN, SUSSEX.—Sept. 17.—For Erection of two Chapels, Keeper's Lodge, Mortuary Enclosing Walls, Construction of Roads, and Completion of Cemetery. Mr. Alfred R. O. Lowndes, Clerk to the Board.

NEWTOWN.—Sept. 5.—For Laying Out and Planting the Newtown and Llanllwchaearn according to Plans by Messrs. Jones and Parke, Architects, Newtown. Mr. W. Cooke, Clerk to the Local Board.

PRESTON.—Sept. 1.—For Building the Harris Fred Library and Museum. Mr. J. Hibbert, Architect, 149 Church Street, Avenham Street, Preston.

RIPONDEN.—Sept. 1.—For Construction of Carriage Road and Boundary Walls for the Rishworth Schools. Messrs. Horsfall & Williams, Architects, Halifax.

SLEAFORD.—Sept. 1.—For Construction of Reservoir. Mr. Jesse Clare Sleaford.



ST. MARGARET'S, KENT.—Sept. 7.—For Erection of a New Coastguard Station at St. Margaret's Bay. Director of Works, 71 Spring Gardens, S.W.

TORQUAY.—Sept. 29.—For Erection of Mansion, Stables, and Cottage at Shipway. Mr. E. H. Harbottle, Architect, Exeter.

WEOBLY.—Sept. 8.—For Works at House and Farm Buildings. Messrs. Ashdown & Son, Architects, Talbot Chambers, Shrewsbury.

WICK.—Sept. 7.—For Building House. Messrs. D. & J. Bryce, Architects, 131 George Street, Edinburgh.

## TENDERS.

### ASHTON-UNDER-LYNE.

For Two Houses at Guide Bridge, for Messrs. Batty & Chappels. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

George, Ashton-under-Lyne	£900 0 0
Burton & Sons, Ashton-under-Lyne	840 0 0
Clayton, Denton	790 10 0
Pike, Hookey Hill	754 0 0
Marsden, Ashton-under-Lyne	750 0 0
Holmes & Webster, Ashton-under-Lyne	740 0 0
Smith, Droydsden	735 0 0
Castle Hall Saw Mills Company, Stalybridge	720 0 0
Neal, Ashton-under-Lyne	720 0 0
Gibson, Dukinfield (accepted)	700 0 0
Williamson, Ashton-under-Lyne	693 10 0

### BELFAST.

For Alterations to No. 36 Donegall Place. Mr. W. J. Fennell, Architect.

McLoughlin & Harvey	£880 0 0
Gabbey	875 0 0
Lowry & Son	775 0 0
Dixon & Co.	760 0 0
H. & J. Martin (accepted)	699 0 0

### BIRMINGHAM.

For Erection of new Premises in Moor Street, Birmingham.

W. & J. Webb	£3,234 0 0
Barker & Son	3,065 0 0
Taylor	3,050 0 0
Davies Bros.	3,030 0 0
Horsley Bros.	2,955 0 0
Williams	2,738 0 0
ROBINSON (accepted)	2,720 0 0

For Alterations to Professional Chambers, Nos. 1 and 2 Waterloo Street, for Mr. H. C. Ogden. Mr. T. FODEN FLINT, Architect, 22 Bennett's Hill. Quantities by Mr. Charles Sharp Smith, 72 Victoria Road, Aston.

Twigg & Son	£745 0 0
J. Smith & Son	695 0 0
T. Smith	690 0 0
Chaffer	680 0 0
Bloore, Aston New Town	650 0 0
Coombes, Moseley	625 10 0
T. & D. DARE, Aston New Town (accepted)	605 0 0

### CANTERBURY.

For Restoring Part of the Dane John Wall.

Gaskin & Son	£198 0 0
TERRY & SONS (accepted)	110 0 0

### CARDIFF.

For Making new Roads and Sewers on the W. H. Cory Estate. Mr. J. P. JONES, Surveyor, 26 Park Street.

Jones Bros.	£877 0 0
Pearson	777 0 0
Rees	747 18 6
RICH & HARRIS (accepted)	676 6 6

For Rebuilding House and Shop at Tongwynlais. Mr. JAMES McBEAN, Architect.

S. B. Evans, Cardiff	£392 10 0
W. Evans, Whitchurch	340 0 0
Williams, Tongwynlais	295 0 0
KINSEY, Tongwynlais (accepted)	295 0 0

### CHERTSEY.

For Alterations and Additions to Sir W. Perkins's School, Chertsey.

Knight & Sons	£422 0 0
Nesmyth	420 0 0
BLAYNEY (accepted)	350 0 0

### COVENTRY.

For the Erection of Villa Residence, Warwick Road, Coventry, for Mr. O. Minster. Mr. HERBERT W. CHATTAWAY, Architect, Trinity Churchyard, Coventry.

Marriott	£2,240 0 0
Worwood	1,917 0 0
HATWOOD, Jun. (accepted)	1,850 0 0

For the Erection of Fitting Shop, Showroom, &c., adjoining the Carroche Tricycle Works, Jordan Well, Coventry, and Repairs to various Premises, for Mr. E. Ralphs. Mr. HERBERT W. CHATTAWAY, Architect.

Wilson	£440 0 0	Fitting Shop.	Repairs.
Haywood	430 0 0	472 10 0	
Makepeace	421 0 0	45 0 0	
Wootton	333 0 0	42 0 0	
MAYO (accepted)	323 0 0	60 0 0	
		30 0 0	

### DEPTFORD.

For the Erection of Four Small Cottages in the rear of the Princess of Wales, Grove Street, for Mr. Frank Barnes. Mr. HENRY ROBERTS, Architect and Surveyor, 113 Lewisham Road, S.E.

Keylock	£700 0 0
Holloway	653 0 0
Redman	597 0 0
HUBBLE & TROTT (accepted)	595 10 0

### EALING.

For Channeling Hartington, Gordon, and Longfield Roads. Mr. WILLEY, Surveyor.

Pizzev	£435 0 0
Ford & Everett	420 0 0
Killingback	420 0 0
Nowell & Robson	389 0 0

### FINCHLEY.

For Concrete Sewer, for the Finchley Local Board.

Pound	£395 0 0
Pizzev	345 0 0
Pollard	317 0 0
BELL (accepted)	280 0 0
Strachan	210 0 0

### GLASGOW.

For Erection of New Offices for the Clyde Trustees in Robertson Street. Messrs. BURNET, Architects.

#### Accepted Tenders.

Morrison & Mason, mason.  
M'Aulay, joiner.  
Reid, plumber.  
M'Gillivray, plasterer.  
Ross & Sons, slater.  
J. & A. P. Currie, glazier.  
Stoffert, fireproof construction.  
Combe & Son, heating.

### HENDON.

For New Roads on the Hendon Station Estate.

Strachan	£3,735 0 0
Walker	3,138 0 0
Adams	3,175 0 0
Pizzev	3,100 0 0

#### Amended Tenders.

Pizzev	2,489 0 0
Adams	2,289 0 0

### ILKESTON.

For Making Up of King Street and Chapel Street.

HAWLEY (accepted)	£360 0 0
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### LLANFAIRFECHAN.

For Building Girls' School. Mr. ASAHIEL P. BELL, Architect, Manchester. Quantities by Architect.

Hunter & Co., Willenhall	£951 0 0
Humphreys, Llanfairfechan	864 9 2
J. B. & W. E. Jones, Llanfairfechan	845 0 0
E. Jones, Llanfairfechan	815 0 0
Griffith, Llanfairfechan	814 8 0
Williams, Llanfairfechan	807 10 0

### LONDON.

For Pewterers' Work at The Falcon, St. John's Hill, Wandsworth, for Mr. Taverner. Mr. H. I. NEWTON, Architect.

Warne	£167 0 0
Kemble	168 0 0
HEATH (accepted)	167 10 0

For Erection of Tabernacle in Stockwell Road, S.W. Messrs. WHEELER & HOLLAND, Architects.

Barnes	£5,880 0 0
Hill Bros.	5,090 0 0
Bolter & Lee	4,555 0 0
Higgs	4,340 0 0
Taylor	3,987 0 0
Richardson	3,949 0 0
Smith & Sons	3,939 0 0
Holloway	3,832 0 0
Cooper & Macey	3,795 0 0

For Additions to St. Mary's, West Kensington, for the Rev. J. Macnaught and the Committee. Mr. E. P. LOFTUS BROCK, F.S.A., Architect.

Browning & Son	£3,240 0 0
Chamberlain Bros.	3,174 0 0
Adamson & Sons	2,976 0 0
Strapson & Co.	2,917 0 0
Lucas & Son	2,750 0 0
Grover	2,720 0 0
Haynes	2,600 0 0

For Erection of Four Shops, Rye Lane, Peckham. Mr. HARRISON, Architect.

Carter	£787 0 0
Oliver	775 0 0
Stafford	769 0 0
Johnson & Cooper	747 0 0
Avis	717 0 0
Niblett	696 0 0
Castle	694 0 0
Eldridge & Gee	689 0 0
Swain	688 0 0
Tarrant	662 0 0
Pyle	648 0 0
D. D. & A. Brown	597 0 0
Holloway	593 0 0
Buchan	581 0 0
Parker	573 0 0
ALDRIDGE & JENVEY (accepted)	537 0 0

### LONDON—continued.

For Works at Church Room, Tufnell Park. Mr. GEORGE TRUEFIT, Architect.

Stuart	£237 0 0
Warne	232 0 0
Grover	228 0 0
BALL & WICKES (accepted)	213 0 0

For Works at St. George's Church, Tufnell Park. Mr. GEORGE TRUEFIT, Architect.

Stuart	£783 0 0
Warne	720 0 0
Grover	594 0 0
BALL & WICKES (accepted)	586 0 0

For Additional Vestry, Corridors, &c., to St. Mark's Church, Walworth, for the Rev. R. R. Resker. Mr. C. M'INTYRE NORTH, Architect, 15 Borough.

Josolyne	£355 0 0
Richardson Bros.	338 0 0
Marsland	313 0 0
Babbs	297 0 0

For Painting, Decorating, and Repairs to be done at the Board Room, Library, and other Offices attached to same at the Licensed Victuallers' Asylum, Asylum Road, Old Kent Road. Mr. W. F. POTTER, Architect. Quantities by Mr. C. R. Griffiths.

Simpson & Annett, Kensington	£258 10 0
Buckman, Peckham	245 0 0
Burford, Bishopsgate Street	220 0 0
Smith, Kennington	199 0 0
Stace, Peckham	199 0 0
Bull, Westminster	187 0 0
Hayworth, Kingsland	165 0 0
Cook, Stonecutter Street, E.C.	159 0 0
WYTHE, Dalston (accepted)	125 7 0

For Laying Down about 3,980 square yards of Wood Paving in St. James's Street and St. James's Place, Westminster.

	A.	B.	C.
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Henson's Street Paving Co.	8 7	—	10 4
Muldoon Bros.	8 6	1 9	9 3
Improved Wood Paving Co.	8 0	0 6	9 5
Turner & Son	7 9	1 6	9 8
Duffy & Son	7 6	2 6	9 2
Alldred	7 4	1 0	9 2
Nowell & Robson	7 0	2 0	9 6
MOYLEM & Co. (accepted)	6 9	2 6	8 3

A—St. James's Street. B—Credit for Pitching. C—St. James's Place.

### MAYFIELD.

For Erecting New House, Carriage Drive, Fencing, &c., for Mr. George Kemp. Mr. EDWARD J. THOMAS, Architect, 79 Mark Lane, E.C.

CLAYTON & CORNFORD (accepted).

### PLAISTOW.

For Building Primitive Methodist Chapel at Plaistow. Mr. DARTNALL, Architect.

Howard, Canning Town	£710 0 0
East, Plaistow	679 0 0
Mears, Plaistow	625 0 0
Cornish, Hale & Hart, Barking Road	510 0 0
Mansfield, Stratford	467 0 0
KEEN, Plaistow (accepted)	460 0 0
Horlock, Barking Road	440 0 0

### SOUTHGATE.

For Extension of 9 and 12-inch Pipe Sewers, about 1,300 yards, with Ventilators, Manholes, Flushing Chambers, &c., at Winchmore Hill. Mr. C. G. LAWSON, Surveyor.

Wheeler, Winchmore Hill	£1,318 17 0
Pound, Bow	817 17 0
Strachan, Wood Green	637 15 0
Bell, Wood Green	594 0 0
Nicholls, Wood Green	545 7 0
GREEN, Dartford (accepted)	438 9 0

### STEYNING (SUSSEX).

For Painting the Outside Wood and Iron Work of the Workhouse and Buildings at New Shoreham.

Hudson, Kearley & Co.	£148 19 0
Geering	93 17 6
Jacklin	93 17 6
Pelling	90 0 0
Crouch	85 0 0
Snawin & Sons	82 11 0
Leeney	57 10 0
S. Saunders	55 0 0
Woolgar & Sons	54 0 0
Jas. J. G. Saunders	52 10 0
Foster	50 0 0
Webb	38 10 0
Parsons	38 0 0
Gates	37 10 0
BROOKER (accepted)	30 10 0
Reading	29 7 0

### SWINDON.

For Alterations to Mr. S. Harrison's House, Swindon, Wilts. Mr. T. S. LANSLOWNE, Architect, Swindon.

Blandford, Swindon	£121 0 0
Henley, Swindon (subject to reductions)	69 13 0

For Gorse Hill Wesleyan Chapel, near Swindon.

Barrett, Swindon	£1,070 10 7
Jackson, Stratton	987 0 0
Henley, Swindon	849 18



ST. ALBANS.

For Alterations to Court House, St. Albans. Mr. U. A. SMITH, Architect.  
Ireson, Northampton . . . . £500 0 0  
MISKIN, St. Albans (accepted) . . . . 470 0 0

SUDBURY.

For Erection of House at Sudbury, near Harrow, for Mr. W. Richardson. Mr. CHARLES JONES, Architect, 151 Ebury Street.  
Scharien & Williams, London . . . £580 0 0  
Coulthard, London . . . . 560 0 0  
BILHAM, Alpertown (accepted) . . . . 494 0 0

TIVERTON.

For the Erection of a Detached Villa on the St. Aubyns Estate, Tiverton, for Mr. W. W. Martin. Mr. J. WATSON, Architect, Torquay.  
Petherick, Plymouth . . . . £1,474 0 0  
Vanstone & Mumford, Torquay . . . 1,339 0 0  
Pyle & Grater, Tiverton . . . . 1,190 0 0

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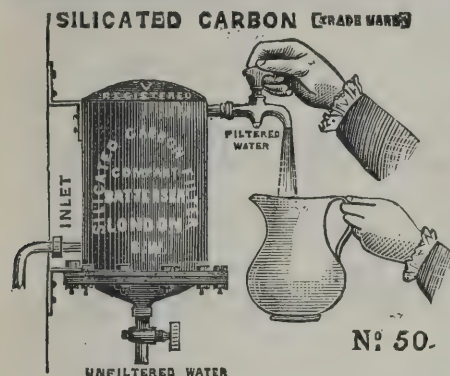
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Contract No. 1.—For Supply and Delivery of Pipes  
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Firmaston Bros. . . . 799 19 6  
Newton, Chambers & Co. . . . 770 14 6  
Staveley Coal and Iron Company . . . 760 11 6  
Stanton Iron Company . . . . 738 19 0  
Butterley Iron Company . . . . 711 5 6  
CLAY CROSS IRON COMPANY (accepted) . . 674 14 8

Contract No. 2.—For Excavating and Laying the above, &c.

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Harvey . . . . 374 8 2  
J. & G. Tomlinson . . . . 370 5 4  
Hilton & Sons . . . . 326 13 4  
Baker & Sons . . . . 310 0 0  
Fort, Buckle & Co. . . . 282 19 8  
Crump & Sons . . . . 278 9 8  
Warren, Stacey & Co. . . . 273 19 2  
Gold . . . . 255 7 10  
TURTON, Derby (accepted) . . . . 222 19 5

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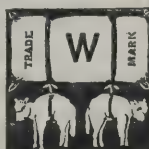
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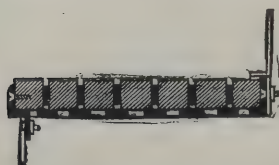
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## IMPROVED PATENT REVERSIBLE TREADS & LANDINGS

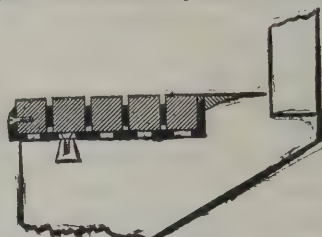
### FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## BOLDNESS OF CONSTRUCTION.



AMONGST the reasons—many of which are not easily discoverable—why the English profession of architects is held in less honour nowadays than on general grounds it ought to be, perhaps one of the weightiest is the manifestation of a certain want of pluck, which by the modern world is always regarded as a sure sign of conscious incompetence. Compared

with our engineers, for instance—and this comparison can seldom, if ever, be avoided—our architects appear to be so completely behind the age in everything that concerns construction that even the most intelligent outsiders seem to think they need go no further for a test. What is engineering but building? And what is architecture but building? Why, then, should the engineer be so courageous and the architect so timid? Every day we hear of something accomplished, or proposed to be accomplished, by engineers, which proves their vocation to be one that is full of bold enterprise and fertile resource. The engineer is a man of science in the highest and noblest sense of the term. His railways, his bridges, his tunnels, his sea-walls, his lighthouses, and a thousand works besides, are Herculean—not gigantic only, but fearless. As the old Egyptian artists in their quaint battle-pieces represented the conqueror of nations, in his character of more than man, in the likeness of an irresistible colossus, so might we in these days, if we had no better mode of expression, not inaptly represent the conquerors of nature. But who would venture to submit to public criticism in any such magnified form the modest proportions of one of our eminent architects? We perceive intuitively that it is not to be done. More especially in an age of strict common sense like the present, when all pretensions are weighed in the same relentless balance of utility, and the very pleasures of imagination and the dreams of hope are reduced almost to algebraical equations, one must see it to be impossible to draw a line across such a very practical field as that of building, and, while on this side encouraging and demanding scientific courage as a *sine quâ non*, on the other to recognise the necessity for nothing else but calm and timorous repose.

We are bold enough to assert that in the very nature of building there is something that repudiates this distinction. If the engineer-constructor, that is to say, must in these days be essentially a bold constructor, then is it impossible for the age to accept the architect-constructor as essentially a timid constructor. That he professes to be an artist first and a builder afterwards is an answer that many will be disposed to offer as a way of escape from the difficulty, but we are quite sure it would be useless to ask English opinion to accept this even as a plausible excuse. There is nothing in art, and least of all in architectural art, which is incompatible with science, or in any way calculated to divert it from its direct aim. On the contrary, it is the boast of architecture that its art is but the handmaid of its science, the dresser, adorer, beautifier, nothing less but nothing more. The abstract architect, therefore, of a generation like ours, is simply the scientific designer *plus* the graceful modeller of building. The engineer, if he has a head on his shoulders, needs nothing more; the architect has a heart in his breast, but he ought to have the same head on his shoulders.

As a mere incident of engineer-construction, for which nobody will think it worth while to claim any particular credit, but which perhaps may nevertheless be of interest to architects as an illustration of our present argument, we will take leave to mention something that has just been done in the City. An underground railway is being formed on the line of Cannon Street and Eastcheap. It is a tunnel of ordinary form some 25 feet wide by 16 feet high, vaulted over in brickwork in the usual way. Now it will be remembered that the statue of King WILLIAM IV., a granite figure of heroic size on a ponderous granite pedestal, occupies a position between the end of Cannon Street and the beginning of Eastcheap—being more artistically placed than usual—which may

be described as very nearly, if not exactly, on the central axis of the two thoroughfares taken as one. The line of tunnel, therefore, would in its simplest form run almost or quite directly under the statue. But the actual weight of the statue with its pedestal and foundation must be a great many tons, and this with the disadvantage of a narrow basis. What, therefore, was to be done? In reply to this question, which probably no English architect would think of answering except in one way, the course decided upon was directly the reverse, namely, to carry the tunnel immediately under the statue; and so the work has been done. No extraordinary precautions were taken; no appearance of settlement has resulted; and the simple fact is that where a few weeks ago the heavy granite pile stood upon the solid ground, it now stands over the centre of a vaulted tunnel and nobody knows the difference.

We do not wish to be understood to claim any particular admiration for this little feat of bold construction; and if we venture to say we do not know any architect who would have taken the risk of it, we have no desire to disparage the profession; we certainly are disposed to think that, if an architect had been the constructor of the tunnel, he might very fairly have pleaded prudence as a reason for diverting the curve, and this is enough for our purpose.

If the truth may be for once a little plainly told, the constructive enterprise of architects seems to be chiefly exercised in economising the substantiality of their walls and timber-work, and, perhaps most of all, their foundations. Daring deeds in this way are no doubt done only too often. It is a common thing to hear a certain class of architects boast of the cheapness of their mode of building. In competitions, when the promoters dictate a maximum of accommodation and a minimum of cost, and when certain competitors claim credit for having adhered honestly by such instructions, while others have not, what is really meant? It is idle to pretend to believe that the difference between one estimate and another is a question of skill in construction, or of skill in artistic design; it is much more a question of what is called economy, the phrase signifying cheap building in the most direct sense, and in an indirect way the most unsubstantial building that a decent designer dares to propose. The time has been in history, and more than once or twice, when the first consideration in building a house or a church was to make it a permanent structure, one that, in common parlance, would last for ever; but in our day the first consideration seems to be, in nine cases out of ten, how to save the last shilling that can be saved if the structure is to stand at all. Exceptions to this melancholy rule there doubtless are, but it is not too much to say that they are such as to entitle the architects concerned to special honour, and to entitle their employers indeed in like manner to the glory that belongs to the virtue of resisting strong temptation.

It is not our purpose, however, to dwell upon the form of professional frailty here indicated; our dissatisfaction points to much higher ground. What we desire to submit for the consideration of the profession of English architects in these days of engineering courage is the proposition that in architectural work also there is room, although not perhaps to the same extent as in engineering, for a similar boldness of construction which shall be characteristic of the age. When we say that the typical engineer is a man of science, we confess to the insinuation that the typical architect is not, and we affirm that he ought to be. Perhaps it is in Gothic work alone that anything really formidable has ever been attempted for the last fifty years, and further back than that it is useless to go. But what is the boldest of our modern Gothic work to the corresponding work of the Mediæval builders? It is no answer to say that modern imitators have never had the same opportunities that were afforded in the Middle Ages by the stupendous enterprises of the Churchmen of those times. No doubt the great magnitude of the Mediæval cathedrals and abbey churches, the unlimited wealth at the command of the clergy, and the prodigious enthusiasm of the artistic religious sentiment, all contributed to the provocation of construction of the most adventurous description; but it must be remembered that the purely scientific or mathematical resources then available were far indeed behind modern standards, and our wonder, consequently, only increases when we contemplate the timidity with which the modern Gothic follows the ancient, glad for the most part to produce a fairly recognisable histrionic presentment of the outer face, while the inner articulation is helplessly ignored. But if, as seems probable, it is in quasi-



Classic style that the great works of the next half century are to be designed, then it is not even in superficial imitation of antiquity that science will find its sphere of action. In a word, what the architect has now to do, if he would emulate the science of the engineer, is to study what the engineer studies, and work as the engineer works upon that basis. Why, for instance, should not our architects again claim for their own the design of bridges? Now that competition has apparently taken a fresh lease of popularity, we should be very glad indeed to see a bridge made the subject of an open contest of this kind, for the mere purpose of allowing architects an opportunity for accepting science and still attempting art. But it is not in such a work as a bridge alone that we see an opening for the architectural science we advocate; in the design of churches, municipal edifices, great domes and towers, railway stations, even warehouses and factories, those who will seek for opportunities to exhibit scientific construction will so frequently find them that nothing beyond the ordinary limits of the architect's practice need ever be demanded by those who are willing, and of course able, to combine advancing science with advancing art.

### THE BRUSSELS ARCHITECTURAL EXHIBITION.

ON the 2nd inst. the Belgian Minister of the Interior declared open an important and interesting exhibition of architectural works, organised by the Société Centrale d'Architecture de la Belgique on the occasion of the tenth anniversary of its foundation. Material assistance was given not only by the municipality of Brussels, but also by the Government. The Minister of the Interior, recognising the services which the society is rendering to the cause of art, placed at their disposal the whole of the upper storey of the Palais des Beaux-Arts, the ground-floor of which is at present occupied by an international photographic exhibition, held by the Association Belge de Photographie.

The Palais des Beaux-Arts, in the Rue de la Régence, inaugurated in 1880, was designed by M. BALAT, Architecte du Roi, and will probably cost, when all the decorations are completed, a sum of 4,000,000 frs., or 160,000*l.* M. BALAT selected the Italian Renaissance style as best lending itself to the conditions of lighting and the various purposes for which the building is intended; that is to say, the triennial fine art exhibition like that of the Royal Academy, public solemnities such as the distribution of prizes, musical festivals, and occasional art exhibitions like the present. He has, therefore, arranged a large central hall flanked by saloons, over which latter is a spacious gallery. The roof is carried by handsome columns of Belgian *rouge royale* marble, which produce a highly imposing effect, recalling some of the compositions of PAUL VERONESE. The façade has four Corinthian columns of red Scotch granite, with bronze capitals and bases. On the summit of the *acrotere*, the cypher of the king, as protector of the beaux-arts, is to be supported by two figures representing *Peace* and her daughter *Prosperity*. One of the four bronze statues surmounting the columns, that of *Music*, is already placed; but the other three, of *Painting*, *Sculpture*, and *Architecture*, are not yet finished. Two bas-reliefs in white marble, representing musical and decorative art, are already in position; and over the doors are busts of RUBENS, JEAN BOLOGNE (the Belgian sculptor), and VAN RUYSBROECK (architect of the Brussels Hôtel de Ville). Two groups of three figures each, representing *Instruction in Art* and *The Reward of Art*, are yet to be placed on two pedestals, one on either side of the peristyle.

The Société Centrale d'Architecture de la Belgique was founded in 1872 by about sixty young architects and architectural draughtsmen. The objects were to improve the status of the members by mutual instruction, by lectures, and by archæological and artistic excursions, and also to establish an office for employment, sought and offered, and a sick fund. Beginning with the various towns of Belgium, so rich in architectural edifices, the excursions were gradually extended to neighbouring countries, and Lille, Cologne, Trèves, and Maestricht were visited in turn. More recently, London (in 1881) and Paris have been included, with the fine old châteaux of Pierrefonds and Coucy, and the splendid cathedrals of Rheims, Beauvais, and Amiens. In these excursions, one member in turn is charged with reporting the particulars, which now form a valuable collection.

The *Journal de l'Architecture* ceased to appear in 1855, and Belgian architects had then no periodical in which the progress of their art was recorded. In 1873, the Central Society founded their organ *L'Emulation*, which was at first conducted *con amore*, in the strictest sense, the various departments of reports, articles, autographic reproduction of drawings, and even the administrative and commercial portions, being undertaken by various members gratis. This publication, the whole series of which is exhibited, has, from small beginnings, attained a position of which the society may well be proud, and its future is now assured by the issue having been undertaken by a well-known art publisher, M. CLAESSEN, of Liège, Paris, and Berlin.

The society has not remained content with merely carrying out the programme traced by its founders, but has taken up the subjects of the rights and duties of architects, their emoluments, and architectural instruction commensurate with the exigencies of the period. It has also been thoroughly impressed with the value of competitions and exhibitions, having organised *concours d'étude* each year from 1877 to 1881, first among its members only and afterwards among Belgian architects generally. This year, with the support of the Government and the municipality of Brussels, the society has been enabled to offer prizes to the amount of 1,800 frs. (72*l.*) for the plans, sections, façades, and details of a high school of architecture. Nineteen designs were sent in to compete, and it was decided to exhibit them in connection with ancient and modern architectural drawings.

There is great difference of opinion abroad as to treatment in architectural designs. Some architects consider that the true architectural drawing should be simply an accurate design, without artistic effect, in support of which they point to the designs carried out in the Middle Ages and in still more remote periods, the drawing of which was so crude and yet the conception so grand. The society, however, takes a different view of the matter. Simple diagrams might, it considers, have sufficed for those grand old architects who devoted their whole life to one important structure, the details of which they could modify as it progressed, according to the effect produced, but too often, alas! dying before their dream was realised. Nowadays, however, the conditions are altered. Time is short, requirements are multifarious and often changeable. A problem is proposed, and must be solved definitely and at once, while the hard, unpoetical estimate must be fixed before a stone is laid. Now comes in the value of architectural design with all the effect that art can give. By means of perspective views, highly coloured and shaded, throwing into relief all the projections and giving due value to the recesses, a good idea may be formed of the effect to be produced by the work when finished. But at the same time the draughtsman must be sincere and conscientious in his work; he must give no meretricious display or fanciful effects of light and shade. In such a case he will only have himself to blame if his work falls short of the anticipation created by the designer. The society is of opinion that a judicious mean between the bare diagram and artistic effect is best arrived at by public competition and exhibition, and that architectural drawings should be exhibited by themselves and not in conjunction with brilliant paintings.

The present exhibition consists of two sections: first, the retrospective collection, of designs executed before 1830, either by Belgians or by foreign architects resident in Belgium, including edifices of the Middle Ages and the Renaissance period; and, secondly, the modern section, divided into thirteen classes, so as to afford better opportunity for comparison, and including the special competition above referred to. The appeal of the society has been well responded to, a great many public bodies and private individuals having lent valuable works for the first section, and Belgian architects having sent in nearly a thousand compositions for the second, without including the nineteen sets of drawings submitted for competition.

The value of the catalogue, admirably got up, by the way, is greatly enhanced by several pages being devoted to *fac-simile* reproductions of the signatures and handwriting of several of the artists represented in the retrospective collection. Thus we find some writing of the second half of the sixteenth century by HANS VREDEMAN DE VRIESE, and his signature in the year 1568. RUBENS has left so many examples of his art as a painter that one is apt to lose sight of the fact that he was also an architect. But the committee of the exhibition recall the fact by giving the first place to a set of sixteen designs, by that great master, of triumphal arches erected at Antwerp for



the fêtes to celebrate the joyful entry of FERDINAND of Austria in 1635. These are followed by two views of the "Hostel Rubens" at Antwerp, where the great painter lived during a portion of his varied career, and the ornamental arcade of which is reproduced in several of his compositions. In the year 1831, while the French army that came to assist the Belgians was besieging Antwerp, it was understood that great care would be taken not to bombard the cathedral. Fearing, however, that some stray shot or shell might destroy the work of so many years, the architect SERRURE, of Antwerp, took careful measurements of the tower, and made a fine drawing both of the elevation and the section, which are exhibited, as well as a design for the southern façade of the transept, by ABEL GRIMMER, inscribed, in 1592, as son to the Master of the Guild of St. Luke. This design does not greatly differ from the actual execution by the sculptors, ANDRÉ and JEAN COLYNS, of Nole.

The town of Oudenarde is represented only by a fine water-colour drawing, from which an engraving was made, of the Gothic Hôtel de Ville, with its remarkably florid ornamentation. The communal authorities of Bruges have sent a bird's-eye view of their city in 1562, printed from copperplates which still exist. It is very minute and exact in its details, and highly valuable from an archæological point of view, as it shows several public buildings which have long since been destroyed. They also contribute a drawing of the market, showing the *couronnement* which was designed in 1780 to replace the spire destroyed by lightning in 1741. The Bruges Academy of Beaux-Arts has lent a plan and perspective view of their central hospital, designed by TILMAN FRANÇOIS SUYS, while Belgium was under the French dominion, the only Belgian who gained the French Prix de Rome.

Brussels is, as might be expected, well represented. The archives of the municipality have yielded up three treasures, two of them being plans of the city, in which its old limits in the twelfth century can be distinctly traced. One, dedicated to the Elector MAXIMILIAN EMANUEL of Bavaria, is taken a short time after the bombardment by the French; and the other is extracted from a work entitled, "*Civitates Orbis Terrarum*," the publication of which was begun in 1572. The third is a view of the city from near the Porte d'Anderlecht about 1730. M. SCHOY has contributed three photographs of old drawings, showing the church of Notre Dame, Grand Sablon, as it appeared with its surroundings in 1615 and 1651, and also the interior on the occasion of the reception, by the Provosts of the Confraternity of St. CHARLES, of the Arch-Duchess MARY ELIZABETH, sister of the Emperor CHARLES VI., Governor-General of the Low Countries. M. MOLESCHOT has sent two views of the collegiate church of St. Michael and Ste. Gudule, while the city authorities have lent a drawing, by BAUERSCHIEDT, of the interior, on the occasion of the inauguration of CHARLES VI. as Duke of Brabant. There is also a good drawing of the celebrated pulpit, representing the *Fall of Man*.

Many are the illustrations connected with the historical Grand Place of Brussels, three engravings showing the beautiful Gothic Hôtel de Ville at different periods of its history. There is a plan prepared in 1564 for the reconstruction of a fountain adjoining the Brod-huis, or Maison du Roi, an engraving representing this edifice in 1646, and another as it appeared after the fire in 1695. The restoration of the celebrated building after the original plans is now nearly completed, including the following chronogram giving its date:—

A peste, fame et bello, libera nos, Maria Pacis  
HIC VoTVM paCIs pVbLICæ ELIZabet ConseCraVIt.

The houses in the Grand' Place—or, as it was then called, the Grand Marché—were nearly all destroyed in the bombardment by the French in 1695, as shown by an engraving lent by M. CH. NENTE, the secretary of the society. Five coloured drawings by DE RONS, dated 1729, 1738, and 1749, from the Brussels archives, show the houses of the various trade corporations as they existed in the eighteenth century. The houses have been so patched and altered in course of time, that it is intended to restore them in accordance with these very drawings, and during the present year 85,000 frs. (3,400*l.*) have been spent upon two houses alone.

Two picturesque water-colours by PUL represent the Porte d'Anvers and the Porte de Hal as they existed in 1786. The former has long since been demolished, but the latter has been restored, and forms a picturesque object near the Midi ter-

minus, besides serving as a museum of antiquities. Another view, after a drawing by the architect SUYS, shows the former Porte Guillaume, or Laeken Gate. Of the upper part of the city there are several engravings. One of them, dating from 1731, shows the Old Court of Brussels with its "bailles" or ornamental stone railing; while a pen-and-ink sketch represents the old palace taken from the park in the first half of the eighteenth century. A contrast is afforded by a perspective view of the Place Royale as it now exists, on nearly the same site. Some drawings of the church of St. Jacques-sur-Caudenberg, by the architect GUYMARD, served for carrying out its restoration in 1773. There is an engraving of the old Convent of the Augustins, erected by DE RONS (1738), of which only the church now remains, being used temporarily for the central post-office.

The communal authorities of Ghent have contributed some original drawings of the Hôtel de Ville by DE WAGHEMAKER and KELDERMANS, the great architects of the sixteenth century. This building is mainly Gothic, but one façade was constructed in the Renaissance style, this incongruity quite spoiling the effect. It is now proposed to carry out the original design, and these drawings will serve for the restoration. There is a copy of the original design for the Ghent belfry, dating from 1183, and a bird's-eye view of the city during the sixteenth century, made by DE NOTER. M. P. SAINTENOY, architect, Brussels, has lent the drawing of a tower supposed to have been designed by the two architects above named, DE WAGHEMAKER and KELDERMANS, for the church of St. Gommaire of Lierre. An interesting relic has been borrowed from the Musée Communal of Louvain, in a drawing on vellum by JOSSE, brother of QUENTIN METSYS, of the three towers intended for the principal façade of the church of St. Peter, Louvain. These towers were begun in 1507, under the direction of this architect, but were never completed.

The archiepiscopal city of Mechlin would naturally furnish abundant material of an archæological character, if it were only for the fine cathedral dedicated to St. ROMBAUT, the tower of which stops short, unfortunately, just above the clock. There is a design for the tower by ANDOCUS VERSLUYS, dated 1727; a drawing, with design for completing the spire, by J. B. DE NOTER in 1823, and another by J. HUNIN in 1828; while a view of the interior, by P. F. DE NOTER in 1809, is contributed by M. DE BRUYNE, of Mechlin. M. P. SAINTENOY, architect, Brussels, sends an engraving giving a *fac-simile* of the design for completing the tower, with the following note on the subject:—

According to Schayes, the magnificent tower of St. Rombaut was begun in 1452, and carried to its present height of 97 mètres 37 centimètres (nearly 319 feet 6 inches) at the beginning of the sixteenth century. The platform which crowns it ought to carry, according to the original design, an openwork stone spire, which would give the tower a height of 600 Mechlin feet. It is this spire which is represented in the engraving. The stones prepared for the work of completion were used in 1583 for the construction of the new fortress of Willemstad in North Brabant. The question of completing the tower was agitated a few years ago, but has been dropped on account of some doubt as to the stability of the lower portion.

There is a curious but effective drawing with a style on oiled paper, by J. B. DE NOTER, of the interior of the ancient church of the Jesuits at Mechlin. Among several pen-and-ink sketches and water-colours of various parts of the city by the same architect, a view of the bridge from the fish-market is very picturesque, and the House of the Fishmongers well worth attention. A view of the Hôtel de Savoye, where MARGARET of Austria died in 1530, is interesting, because the building has been restored by M. BLOMME, Architecte Provincial. A small drawing numbered 170, consisting of several minute water-colours of the old gates of Mechlin, executed by J. B. DE NOTER, is not only very picturesque, but also highly interesting archæologically, as giving a good idea of the military architecture of Flanders in the fifteenth century. In the same way an engraving of the old château of Odonck, by NEEFFS, shows the type of a Brabant country-house in the sixteenth century.

We have only noticed the most prominent of the many interesting contributions to this excellent exhibition, and the present article has attained such a length that we must leave all mention of the competition and modern section until next week. We would, however, observe that the many professional men who select this part of the year for a trip to the Continent



would do well to devote a day to this exhibition in the Palais des Beaux-Arts, Brussels, which is to remain open during September. Nor is it out of place to remind our readers that the Great Eastern Company have built a magnificent quay at Harwich, while the new arrangements at Antwerp admit of trains running direct from the landing-place; and the new steamer *Norwich*, illuminated by the electric light, is but an addition to the already fine fleet of steamers belonging to this enterprising company.

## CIRCULAR NOTES FROM FRANCONIA.—II.

[BY A CORRESPONDENT.]

THE Nürnberg folk like to remind a stranger that the first railroad laid down in Germany was on the few miles which separate their city from Fürth, the neighbouring manufacturing town, almost suburb, sometimes called the German Birmingham. The approach from this side awakes the traveller who is dreaming of mediæval times and straining his eyes for the towered walls and castle of Nürnberg, with abrupt recall to realities. Not only does flourishing Fürth cluster its tall chimneys and hide the sky with clouds of smoke, but immediately outside Nürnberg itself like abominations now furnish the most disillusionising of preludes to the picturesque home of DÜRER and SACHS, and of all the artist craftsmen who wrought into wood and stone and iron the cunning inventions of their brains. Here, however, the shock of modern incongruity ceases, and the carriage that conveys you to your hotel (and if you are wise that hotel will be the "Strauss") rumbles across a bridge over the dry moat, letting you have glimpse of a vista of grey walls draped with creepers, and through a massive town-gate into quiet streets that are still shadowed by the deep projecting roofs and high gables of the sixteenth century. It is no little satisfaction, after ten or fifteen years' absence, during which all kinds of discomposing reports as to the utter disfigurement of old Nürnberg have sounded in one's ears, to find that, after all, the town is so little changed, or, at any rate, that so much that is characteristic yet remains. Of course, the few wide streets that admit of a tramway have not been opened up without demolition of what was more picturesque if less convenient; and the decidedly improved sanitation of the place, although still none of the sweetest, has been secured by the loss of buildings which literally savoured of the past. A set of old prints of the town, brought out last century, show how many an old house has been pulled down to make room for public offices or the opening of small squares or garden enclosures, especially on the southern half of the Lorenz-Seite. The reason why these demolitions do not tell more to the destruction of the quaint and antique aspect of the town is that the new dwelling-houses and public edifices are for the most part built in the same style as those which have been destroyed; so that no startling anomalies exist such as make the streets of many an old town in England and on the Continent *chose pour rire*. We have, indeed, heard the innocent tourist in Nürnberg fall into sentimental ecstasies over some of these successful imitations of the domestic architecture of the sixteenth century, under the conviction that he was doing homage to the past.

One great change, and a change that cannot be deplored, is the laying out of the ground immediately beyond the city walls, for at least two-thirds of the circuit, in *allées* and garden, thus providing for a town which is too small and closely packed for interior gardens of any size—a pleasant and wholesome resort, and also serving to mask the environment of modern residences and manufactories. The walk round the walls is unique in its way, being not, as in many towns, on the ramparts, but beyond the moat or *Graben*. Thus you have the picturesque view of the walls themselves, their warm, soft, grey face tangled over with wilding bushes and creepers that have rooted in the crevices, or shadowed by the larger trees that have grown up in the dry, grass-grown moat. At frequent intervals the line of wall is broken by a round buttress tower or a more lofty watch-tower, with conical or steep roof in bright red tile, sometimes with corner turrets bracketed out. Every few yards gives a fresh picture as the walls and towers fall into perspective view, and group with glimpses of the distant Burg standing high at the northern angle of the town, or with the rich red-toned, deep-eaved, and many-dormered roofs of the houses within, with the purple spires of St. Sebald, or the ruddy towers of the

Lorenzkirche behind. On a summer's evening the whole scene glows with colour, and fascinates by a charm of varied and quaint forms, stamped with the marks of an historic past. The artist will find the older buildings of the Burg, the "five-cornered tower" (now consecrated as a "chamber of horrors" to a collection of instruments of torture), and the outer walls tell well from the northern circuit, while the most pictorial general views, such as we have just hinted at, are to be found on the west. Within the town ample material offers itself to the draughtsman and lover of the picturesque, although, it must be confessed, there is a look of having been "tidied up" about the place. Yet the brown and unsavoury waters of the Pegnitz are still overhung by quaint timber houses, with tumble-down double balconies and deep roofs: the island of the rag market, and the succession of bridges, the Karlsbrücke, the Henkersteg, and the Maxbrücke break up the vista on one hand, while the nondescript buildings and trees on the Insel Schütt divide the river to the east of the Museumsbrücke. The market booths still crowd the square beneath the rich façade of the Frauenkirche, which, redecored and furnished by zealous Catholics as a protest for the true church amidst Lutheran Nürnberg, has within lost much of its attraction from an antiquarian point, though doubtless Professor ESSENWEIN, Director of the Germanic Museum, has done his work with some taste, and far better than his predecessor HEIDELOFF, King LUDWIG's potent restorer. The Moritz-Kapelle is being repaired, and is eclipsed by scaffolding; all the pictures are removed to the Museum. So is, on loan, the famous portrait of *Holzscher* by DÜRER, formerly in a private house. Probably not many years will elapse before the mania for concentrating all art objects in one *omnium gatherum* of a museum, thus separating them from the surroundings and purposes for which they were devised, will strip the churches of the pictures and sculpture still left in place; the process has already begun. We should not be surprised to hear, for instance, that the Stations by ADAM KRAFFT were to be removed from Johannis Gasse, the road to the cemetery, where doubtless they suffer from weather and from the intrusion of dwelling-houses. As yet such sacrilegious kind of conservation is not talked of, and the dramatic and energetic reliefs of the Passion, which the pious citizen, MARTIN KETZEL, had set up towards 1489, keep the due places which he twice made pilgrimage to Jerusalem to measure on the holy way itself. Modern irreverence has built in several of the stations into the walls of the houses, which now have multiplied within the last decade into a suburb on either side the road, and much destroy the old peaceful character of the way to the Friedhof, where the great men of Nürnberg lie under their tombstones of stone garnished with wrought metal. The force and passion of KRAFFT's work strike one deeply at Nürnberg, where he did so much, but the conviction only increases upon one that his art, fine though it be and instinct with rough fervour, was always the art of the peasant and the craftsman; vigorous, narrative, but essentially homely, broad, and simple, full of personal experience of the working life about him in portraiture of his fellow men and their ways; having fire, indeed, but no ideal flame. In looking at the scenes from the Passion, we were curiously struck by reminiscence of a young, self-made artist at home, GEORGE TINWORTH, whose work in its disingenuous dramatic power seems like a reflex of the old Nürnberg school, curiously broken by modern modes of feeling.

There is one tomb in the Johannis Kirchhof which seems to pass unnoticed, and yet has a style and beauty quite apart. It belongs seemingly to the beginning or middle of the sixteenth century, but the names of the deceased (ULRICH is the first) and date are hard to decipher. It is a stone tomb, standing about three feet high; on the flat surface is extended a bronze crucifix, very finely chiselled, and bearing the character rather of Italian or Flemish work than of the local German school; the corners of the moulded cornice are bevelled away, and form a canopy for a little bronze kneeling figure of an angel with flowing drapery and pointed wings; the sides of the tomb are simply arcaded in low relief, on either side a small memorial tablet. Of the kneeling angels one is gone entirely—perhaps stolen or bought—one is headless, the two next the roadway are still entire. The position of this beautiful tomb, almost touching the iron enclosure of the cemetery, where the grass grows rank, and between the two gates, has perhaps caused it to escape notice; otherwise the beauty of the bronze sculpture and the tasteful simplicity of the design could hardly have



failed of comment. The figures may be of VISCHER's school, which was influenced by Italian art, but they look rather like the work of an Italian who has come in contact with northern thought, and gathered therefrom energy without losing the sweetness and grace of his native models. The heads are delicate in feature and full of expression, the limbs long, the body of the CHRIST rather exaggerated in attenuation, but entirely without the tendency to grotesque exaggeration of the German sculptors; the draperies of the kneeling angels are cast in free folds. Here, at any rate, is an example of precious art which should at least be recorded before it suffer further injury.

The use of metal decoration on the stone tombs in this churchyard, for over a century at least, is very striking and peculiar to the place. Inlay in metal is of course a practice pretty generally spread, but the Nürnberg mode is the placing of shields, medallions, and so forth, in high and even detached relief, in often elaborate designs of figures, scroll work and fantastic forms. Why next to none of the grand bronze monumental effigies in relief by VISCHER and his pupils, which are to be found in neighbouring towns, especially at Bamberg, appear to have been commissioned in his native city, is matter for curiosity. Next to his famous shrine, of which we have a fac-simile at South Kensington, these memorials were his finest products, and gave scope for individual treatment and cunning handiwork.

The guide-books are so full in their descriptions of Nürnberg that the reader might be justifiably impatient of comment now on what is pretty well known. The newest local guides were brought out last year, when the Bavarian Industrial Exhibition was held here, and the usual flourish of trumpets was blown over improvements of the town on the utilitarian side, which, as regards the pictorial aspect of the place, are all destructive. It is even said that the gateways and walls are threatened with further demolition. Already three gateways, the Wörderthor, the Lauferthor, except the round tower, the walls between them, and the Max Thor are gone. The great building—formerly an arsenal—now used as a customs house and store in the Königstrasse, with its memorable roof with six tiers of dormers, is to be done away with or restored; and probably many picturesque dwelling-houses and quaint corners will be swept off in the next few years, although the spirit of reverential conservation seems to protect the more important relics and to guide the renovations within the town. As yet the shopkeepers have not swelled into pride of plate-glass frontage, and we do not remember seeing in the streets a single instance of decoration by placards and flaming advertisements, graphic or otherwise. Some of the most important relics, the famous *Triumph of Maximilian* and other wall-paintings in an oil medium of DÜRER and his contemporaries, in the older portion of the Rāthhaus, are in a very bad state, and do not admit of easy restoration: indeed, they have already suffered from rough patching up at no remote period. Again, the stone of which many churches and public fountains are built—a sandstone—is very friable, and the amount of renovation already accomplished is enormous and rather puzzling, inasmuch as wear and weather stains soon give an antique appearance to the new work. If, on the whole, therefore, Nürnberg revisited is not wholly a disappointment, one's feeling of satisfaction is tempered by fears for the future, and by an uncomfortable consciousness that the alterations in the "old familiar face" are none the less real because so gradually and gently made.

As we drive out of the Thiergärtner Thor, bound for the hills of Franconian Switzerland, and look back over the pleasant fields, where the larks are at full song in the blue air, to the broken outline of the castle and the towers of St. Sebald, it is with a feeling that Mediæval Nürnberg will inevitably fall to pieces before the prosperity of a new future; that this waking dream, as it seems to us, of that wonderful *Blüthezeit* of four centuries ago, with its quickening into art and song, its curious invention and proud commerce, and its dark shadow of oppression and cruelty ever mocking the boast of freedom, will soon fade back into the invisible *Nirgendheim* of things that pass and leave no trace.

## PARIS NOTES.

THE Great National Exhibition, which will be opened on the 15th inst. at the Palais de l'Industrie, is attracting each day more attention from the public, who are now beginning to realise how important the undertaking is likely to prove in its effect upon art. As already announced in *The Architect*, this triennial exhibition is intended to collect and display a selection from the works produced during the three previous years, and as the number of exhibits is limited to 700 paintings, 300 sculptures, and 150 engravings, it will form a sort of critical appendix to the preceding Salons. For this occasion only all works executed during the past five years have been made eligible for admission, and an unexampled opportunity will thus be afforded for judging of the progress realised during that period by French art as a whole. The entrance is fixed at 2 frs. from nine to twelve, and 1 fr. from noon to five, admittance on Sundays and Thursdays being free.

The President of the Jury of Selection, M. Meissonnier, sends twelve works, ten of which have never hitherto been shown, and will certainly prove one of the greatest attractions of the exhibition. Portrait-painting will be represented by MM. Hébert, Cabanel, and Bonnat, the latter of whom shows eight works, three of them quite new. M. Henner contributes two new paintings, an *Andromede* and a *Grande Religieuse*—the head of the latter was exhibited last year. M. Cazin has a small work, showing the *Death Room of Gambetta*, which was exhibited lately at the Dudley Gallery; M. Henri Levy, the *Coronation of Charlemagne* and others; M. Guillaumet, *Jackals beside a Dead Body*; and M. Brozik, *John Huss*. Other exhibitors are MM. Jules Dupré—who has carefully kept his work aloof from the public for some considerable time—Bastien-Lepage, Bouguereau, Jules Lefebvre, Bréton, Harpignies, Lhermitte, and Berne-Bellecour. The chief sculptors are MM. Falguière, Mercié, and Lançon. M. Barrias shows a statue of Mozart when young, which is universally pronounced a masterpiece. The exhibition was visited last week by M. Jules Ferry, Premier and Minister of Fine Arts, who will preside at the opening ceremony on the 15th inst., when he will be supported by MM. Kaempfen, Director of Fine Arts; Poulain, Director of Public Buildings Department; Lafenestre, General Commissioner of Exhibitions; and Ollendorff, chief secretary of the exhibition.

The Luxembourg Museum was closed on the 31st ult. until the 11th inst. This measure was necessary in order to allow of the removal of those paintings and statues acquired by the State at the last five Salons, which have been admitted to the national exhibition above referred to.

Busts of M. Autran, of the Académie Française; of M. Perroud, sculptor, of the Académie des Beaux-Arts; and of M. Littré, of the Académie Française, have just been placed in the entrance-hall of the Institute. The Minister of Public Instruction has, moreover, ordered from M. Carlier a bust of the late M. Alexandre Hesse, member of the Académie des Beaux-Arts; and from M. Hiolin one of the late M. de Lasteyrie, member of the Académie des Inscriptions et Belles-Lettres.

The French School at Athens has already suspended for the season its archæological excavations at Delos. The fevers prevailing in the island and the neighbourhood of the cholera lazaret have, in fact, forced the director to stop work much earlier than usual. During the season, however, some important discoveries have been made, and these results will shortly be published in pamphlet form. A competition for three vacancies in the school will be opened next month; candidates must be under thirty years of age, hold the diploma either of Doctor of Literature or of Agrégé of Literature, Grammar, Philosophy, or History.

The nursery of French civil engineers and architects, the Ecole Centrale des Arts et Manufactures de l'Etat, whose present quarters are the old Hôtel de Thorigny in the Marais quarter, is to be transferred to new buildings in the Marché Saint-Martin. The change was fixed upon in principle some time back, but the execution has hitherto been delayed by the difficulty of finding a suitable site for the reception of the market. This has now been overcome by amalgamating the latter with the great Marché du Temple close by, a section of that large building being set aside for the accommodation of the dealers and stall-keepers affected. The Minister of Commerce is now, therefore, able to invite tenders for the buildings, which will be erected wholly at the expense of the State. In its new premises the school will almost touch the Conservatoire de

The Statue of Mr. Gladstone, which has been subscribed for by the members of the City Liberal Club, will be placed in its position in the hall of the club in the second week of October. The commission for the statue was entrusted to Mr. E. Onslow Ford.



Arts et Métiers, where are to be found very complete collections of instruments, models, and apparatus—in fact, a technological museum of very varied character. A still further advantage of this proximity lies in the opportunities that will thus be afforded to pupils of the school to attend the lectures on trade and commercial economy, that have lately been started at the Conservatoire.

In the exhibition of the Graphic Arts about to be opened at Vienna, the French section will be very prominent, the following great engravers and draughtsmen, among others, being represented: La Guillermet, eight engravings; Jacquet, four proofs; Gaillard, four designs for borders; Levy, several portraits; Flameng, eaux-fortes; Lalonne, twenty-four eaux-fortes; Waltner, sixteen engravings; G. Bellanger, fifteen engravings of Proudhon's works; Henriquel-Dupont, Despontins, and Jacott, various engravings. A further interesting feature of the section will be the collection sent by the Ministry of Public Instruction and Fine Arts, containing all the plates ordered of and executed by the Engraving Department (La Chalcographie) at the Louvre from 1833 to the present day.

### THE FUTURE OF ORNAMENT.\*

IT is the copyists, in fact, that are responsible for all that is wrong in our arts of design. They are the people who have pandered to the vulgar desire for all sorts of ornament at once, and as much of it as possible for the money. They have debauched all known styles by running them together without rhyme or reason, and they have lacked the imagination to create out of them a new style. They have applied their invention to contriving processes by which work which ought to be costly might be cheaply travestied, and to "adapting" to machinery the old patterns, all the beauty of which was due to their being wrought by hand.

All this is to be changed, and indeed is being changed under our eyes. The man who last year was satisfied with bad copies of fine things, only was not satisfied with any reasonable number of them, must now have originals. It has begun to be understood that machine work is poor and uninteresting; and, most important, our social life is taking form and demanding to find expression in those arts that have so long helped to obfuscate and disorganise it. A new spirit is creeping into the arts of design (beginning, as is right, with architecture) which must end in completely revolutionising them. Opinions differ about it, from that of the Georgia man who writes to the *American Architect* to say that the American mind requires "sky-scrapers," cheap elaboration, and Fourth-of-July sentiments expressed in stone and metal; who thinks that the art of the future will include wonderful combinations of dome and steeple, zinc roosters and spread eagles, and stars and stripes everywhere in red, white, and blue paint—from this gentleman's notions to the judgments of good architects who have endeavoured with some modification of the Romanesque or the early French Renaissance, to meet the requirements of our time and circumstances. The choice of these styles is suggestive, as they agree in using active rather than passive support.

If we can assume that the architectural style of the near future will embody our ideas of wholesomeness, active strength, vitality, and our common sense, unmythic views, the demand will soon be made on the decorator that he also give form and expression in his work to the same conceptions. We shall want more action than has been put into European ornament for a long period; a high vitality will demand pure and splendid colouring; a sound intelligence will see to it that the entire arrangement is understandable, governed by exact relations and definite canons of proportion. Neither Romanesque nor Gothic nor Renaissance ornament answers all of these demands. The first two systems contain too much of religious symbolism; the last, with all its beauty, is too flat, tame, and meaningless for our uses. In all the fine work of the Italian Renaissance there is visible a self-satisfied smirk, a look of greasy contentment which does not suit a sharp-set generation; and the livelier French styles were but the beginning of that wonderful artistic spree which the French people have been keeping up ever since the fifteenth century, but which they have not succeeded in getting other nations to participate in. We shall have to return to ornaments such as are common to all styles, based upon necessary structure and the capacities of materials, and are given beauty and character by the adaptation of proper natural forms. There are precedents enough to guide designers and others in making such a change. In many ways the present art movement is similar to that which brought Byzantine architecture to life, and re-modelled all Classic ornamentation at the beginning of our era. Then, as at present, among a great commingling of races, a new and freer life had begun, which had its say in a fresh and logical architecture, in the splendid colouring of mosaics, and in exuberant and

fanciful ornament. Variations of the old designs were made necessary by the new shapes of arch and dome and pendentive, but not less by the quickened feeling for a truth and power and grace that all could understand, and which, as much as any religious need, had produced the new forms of building themselves. The novel designs of the Byzantines show a closer and keener observation of nature than that of the ancient Greeks or Romans. The acanthus foliage of the capitals, from the soft and graceful ornament of the Greeks, became crisp and sharp, like the stronger variety of the plant. The rolling scrolls, borrowed from the Romans, were given life, growth, and variety. The vine especially (its significance in Christian symbolism made it specially important) became more like the natural vine than it has ever been before or since in decorative work. In a sketch of a portion of a ceiling at Ravenna, the grape-vine, with its large leaves and bunches of fruit, is not, it is true, so thoroughly naturalistic as modern French drawings from nature of sprays of the same plant, with leaves and their shadows, which admirably suggest an ornament but do not furnish one. But it states, nevertheless, a clearer and more virile conception of the nature of a vine. The top of the big boulder that overhangs the cave before described is clambered over by a Virginia creeper. It has this barren spot all to itself, and is at perfect liberty to run straight ahead over it, or to indulge in caprices and zigzags to any extent. It does both. It stops and gathers itself up occasionally to fling some budding sprays in the air; but, for the most part, it proceeds by the shortest road in search of nourishment. This double propensity of all vines struck the Byzantine workman as a useful thing to note about them. The grapes and the large leaves of the grape-vine he was interested in, both for their symbolic meaning and their decorative appearance; but the long bare coils of brown stem, and the sudden bursting out into leaves and tendrils which are characteristic of vines in general, these were still more to his purpose, and he was more earnestly bent upon reproducing them in his work than upon giving exact representations of foliage or of fruit. His barren lengths of stem he needed to frame in the lanky figures of his saints; the luxuriance of grape cluster and leaf and tendril served to fill the blanks between them. The resulting ornament is more like nature than the soft and regularly-foliaged vine-forms that preceded it. And it was the attention which the designers of early Christian times gave to the development of their own superior principles of elasticity and strength in construction that opened their minds to the perception of the same qualities in nature and enabled them to make such excellent use of natural forms in their decorations.

The new needs and ideas of life which have produced so many constructive problems which architects and engineers have found means to solve must soon begin to exercise an important influence on ornamental design. The artist in this way will have to put into his work some of the feeling for constructive truth, for economy of materials and of work, and for practical usefulness that is beginning to distinguish our architecture. He will be expected to enliven and beautify whatever he touches, without taking from its apparent strength and effectiveness—to add an elegance, a magnificence, a wealth of real meaning that without him the work would lack. In doing this he will doubtless have constant opportunities to base his endeavours upon the traditional forms whose uses and general significance are well known; but he will have to engraft upon them a new expression of force or grace, and to fit them for positions and purposes, not, in all respects, like the old. He may get on such points plenty of useful hints from the nature that surrounds him. Every twig and ground plant will furnish him with crestings and rosettes, every vine and creeper with new scrolls. He will find that at times it may be better to follow the leaf of the crow-foot or of the columbine than that of the acanthus, which he has never seen. The beautifully divided leaves of the dicentra and its pretty drooping racemes of two-horned white flowers might readily suggest the leafage and the flower ornament between the volutes of a capital. Curled ferns might answer for the volutes themselves, and the channelings of the shaft might be copied from those of the skunk-cabbage as it pushes up through the black mud in early spring.

In the meantime, and in the absence of a sound and living art, the student may find in nature exemplifications without end of the laws which should always govern the creation and application of ornament. In nature, most things owe whatever beauty of form they possess to perfect adaptation to their use and circumstances. An animal or plant which is only partly adapted to its conditions of existence is ugly in exact proportion to its lack of viability. In nature, any excess of force beyond what is needed for structural or functional purposes is immediately applied to the production of ornamental excrescences or fine colours. Ornament is turned again to use; the bright colours of flowers serve to attract insects; the markings of animals are for disguise or recognition, or to create fear or inspire affection.

The strictest utilitarian cannot find fault with the way in which the crane's bill and the meadow violet expend their surplus revenue in adding to their attractiveness. In their case, as in that of the dark chevrons of the chick-weed leaf and the white crescents of the clover, the distribution of the colour is guided both by the radiating or branching structure of leaf or petal, and by the distances from the source of supply. The leaves of the dog-tooth

\* From a paper by Mr. Roger Riordan in the *Century*.



violet, which have a framework of parallel veins bound together by cross veins, are spotted with dark colour in the centres of the rectangular spaces between them. These ornamental markings represent a remnant of force left over from the construction of the leaf, and not sufficient to flush it all with colour. They occupy the exact place where a good decorator would put them, close to the important points and lines, but seldom upon them. This relation of colour to vitality in its intensity and power, and to structure in its distribution, is very obvious in birds. The head, the gorge, breast, back, wings, and tail—the most important parts of the superficies—get the most of it. In the neighbourhood of these parts, at least in vigorous species, there is sure to be some accumulation of force, which shows itself in ornamental appendages like crests and gorgets and wing covers, or in striking colours, or both. The heads and necks of several varieties of pheasants show this very plainly, but it is easily observable even in our smaller and more plain coloured birds, in the tessellated wings of the hairy woodpecker, and in the painted eyebrows and quill feathers of the wood warbler. The colour is seldom applied upon the working parts. It is vague and diffuse on the larger, unimportant spaces. In feathers, it is at some distance from the shaft and between it and the edge that the darkest colour shows itself. In butterfly wings, the bands and spots show the same dependence on the general form and on the veining.

There is a strict analogy between all this and the way in which the work of decoration should always be carried on. In amount and intensity it should bear a relation to the importance of the work. Its distribution should be as if the builders or manufacturers, after the completion of the necessary portions of their work, would not rest at that, but proceeded to cover the contiguous spaces with decorations. Some such feeling has always regulated the distribution of ornament in every good period of art; and the corresponding notion that it is true economy, for either nation or individual, to hold surplus wealth in the form of splendid decorations, seems to have been general in all former periods of great social activity and power.

### THE MANCHESTER ART GALLERY.

THE Corporation Art Gallery in Mosley Street, Manchester, was opened on Friday in last week by Lord Carlingford. The building was formerly the Royal Institution. Under a private Act passed last year, the corporation took power to establish a permanent gallery of art for the city, and to devote to that purpose a sum of 2,000*l.* a year for twenty years out of the rates. The proprietors of the Royal Institution transferred their property to the corporation, reserving to themselves certain privileges and a number of seats upon the Art Gallery Committee of the corporation. This committee, formed partly of members of the council, and partly of governors of the old institution, will be the governing body of the art gallery, acting, of course, under the direction of the city council. The work hitherto carried on by the Royal Institution, including the holding of periodical loan exhibitions of pictures, and the delivery of scientific, literary, and other lectures, will be continued. Since the building came into the hands of the corporation it has undergone a series of structural alterations, and is now well adapted to the purpose it will in future serve. The nucleus of a permanent gallery of pictures is already in the hands of the corporation, who have also recently obtained by gift or purchase several valuable works of art.

Lord Carlingford, referring to the collection of paintings in the gallery, said: It is a happy thing for our present and recent art that those who are capable of buying pictures in this region have turned their attention that way. Some of you may remember the way in which Byron describes the taste of his somewhat profane hero, when he says that he turns from "grisly saints and martyrs hairy" to more pleasing subjects. Well, the princes of commerce and the chiefs of industry in this district have been sensible enough to turn away from indifferent pictures by old masters, and still more indifferent copies of good and great pictures by old masters, and they have devoted their taste and a share of their wealth to the purchase of the best pictures produced by the art of our own day, and illustrating the life of our own day. That is a most happy event, and I repeat that it makes Manchester, and the region that Manchester represents, of the greatest and most vital value to our present British art. A thought that occurs to me is that one would be glad if there were a greater demand than there is for pictures dealing with higher and more permanent subjects, works of art, especially of an historical character, illustrating the history of our own country in all its parts. That, however, is a class of art which must depend mainly upon the patronage and demand of public bodies rather than upon private individuals who desire capital pictures to hang in their drawing-rooms. For such a demand as that we must look rather to public bodies than to private persons, but it would be a great thing if public bodies were to imitate, as I trust they will in the days to come, the example which has been set by the corporation of Manchester, which has been fortunate enough to induce Mr. Madox Brown to adorn the walls of the town hall with his historical pictures dealing with the history of

Manchester. But, setting that aside, we all here may rejoice that Manchester has the attractive power of drawing within its walls so charming and interesting a collection of pictures as we see around us, and I trust that great numbers of your citizens will enjoy them for some months to come.

In the evening there was a *soirée* in the town hall, when Lord Carlingford again congratulated the citizens of Manchester on the possession of the gallery. He was glad that the art gallery was to contain something more than a collection of pictures—that the corporation had already obtained a valuable collection of specimens of textile art. The collection obtained from Dr. Bock was so good that it might have been intercepted by the department if duplicates had not been already in the museum. His lordship promised that the department would place in the gallery a most valuable collection of examples of silk manufacture, which had been received from the Chamber of Commerce of Lyons.

Mr. Slagg, M.P., said there was no doubt that the future industrial battle of the world would be fought out in a large measure upon artistic grounds. He thought it had far too readily been assumed, in regard to the industrial power of the people of this country, that their function in life was rather to turn out large quantities of commodities at cheap prices, than to invest them with the beauties and the glories of artistic design. That function and that department of industry had been relegated far too much to our better cultivated foreign neighbours. He dissented entirely from that, and he had the very fullest evidence, which recent opportunities had enabled him to obtain, that there were no industrial classes in the world better fitted than those of the United Kingdom to learn and to do all that related, not only to excellence of workmanship, but to excellence of art and design. We had not excelled in this direction because the people had not been taught. Although he very greatly sympathised with much that had fallen from Lord Carlingford in regard to the excellent system of art education which was now being carried on in this country, he could not quite agree with him in the satisfaction he expressed in regard to it; for he did not consider that it was by any means all that we should hope for or all that we should aim at. Nor could he quite think that we were equal to our Continental neighbours in this respect. He was deeply impressed with the view that in this country we hardly understand art education as it was understood in France and in Belgium. It would surprise many of those present to know the enormous proportion of artisans in those countries who learnt drawing, and not only drawing, but the higher branches of art, and not only in relation to special trades to which it applied, but also for the very love of the thing, and as a matter of general culture and education. He asked them, did such a state of things yet exist amongst our artisan class? and he thought they would be bound to answer that it hardly did. But he looked forward to the time when those opportunities and facilities should be afforded in such a degree that we should be not only equal to, but very soon excel, as we had all the means of being able to do, any nations with which we were brought into commercial rivalry.

Sir P. Cunliffe Owen said that when he went to the Paris Exhibition and asked the authorities in a very gentle way to give some more space for English fine arts they answered, "Why, you have no such thing as a British school. We don't know it in France." But when they saw that magnificent collection of pictures, and saw written over the door "British School," they were forced to acknowledge that there was such a thing as British art and such a thing as what was called an English style. The French were shown that in 1878, and when another international exhibition came round we should be able to show them still further that we could trust to ourselves; and that although we might have designs upon them, which we certainly had, in endeavouring to take from them their markets and to keep them for ourselves, we could also design for our own manufacturers if our manufacturers would only believe in themselves and in the designing power that there was in their own country. He knew it was a fact that the French people had their eyes upon our schools of art, and that they were watching the young men who were taking the prizes at the various schools of art. He would give the audience an instance of this. At Nottingham, a young student, who had taken many prizes in the school of art, received, before he got his last prize, an appointment from a firm for making designs in Paris, at 400*l.* a year. Now, if the French were not afraid of taking our students who were trained in our schools, did we not think our manufacturers might with that public spirit which Manchester was so distinguished for, encourage the school of art and the students who were taking that instruction which had been so freely offered to them.

Messrs. Whitfield & Co., of Oxford Street, Birmingham, have purchased the goodwill and patent rights of the Sicker Safe Company, and intend to carry on the manufacture of Sicker safes, in addition to those for which they are so well known.

A Company has been formed, with 100,000*l.* capital, entitled the Birmingham Artisans' Dwellings Company, for the purpose of providing healthy dwellings for the artisan and working classes in Birmingham and its suburbs. Mr. J. Cartland is the chairman.



## NOTES AND COMMENTS.

THE papers have announced that Mr. SMALMAN SMITH has been appointed to a judgeship at the Gold Coast. *The Architect* will in consequence lose the aid of a valued contributor. Mr. SMITH acquired a knowledge of architectural routine in his father's office, and his articles on law in relation to building had in consequence a practical character, which distinguishes them from the writings of other lawyers. It was that knowledge which enabled him to point out the shortcomings of a good many judicial decisions in building cases, and it is but fair to say that the decisions of Courts of Appeal and of the House of Lords have been sometimes anticipated in Mr. SMITH's articles. The Gold Coast does not appear to be the most fitting place for the exercise of so full a knowledge of technical law. Mr. SMITH has rendered good service to the Institution of Surveyors by his papers and assistance in the examination of associates.

THE programme of the congress of the Social Science Association, which is to be held in Huddersfield from October 3 to 10, has been arranged as far as regards "special questions." The subjects to be discussed in the Art Department are as follows: 1. Ought our museums and art galleries to be open on Sundays, and if so, under what conditions? 2. How can a school of art, as applied to textile and other manufactures, be best supported and utilised with a view to meeting foreign competition? 3. What constitutes a "school of music," and how far can the formation of an English school be encouraged? One of the questions in the section of Municipal Law is: Whether it is desirable that the Employers' Liability Act, 1880, should be amended and extended, with a view of securing and simplifying the remedy of the servant and preventing the servant from contracting himself out of the Act, and the master from insuring himself from liability under the Act.

IN Turkey three distinct classes of Smyrna carpets are recognised, according to the towns where they are manufactured. The thick-piled carpets, known in England as Turkey carpets, are made in Ushak. The trade, which is of considerable antiquity, has been largely developed since the Franco-German War. Twenty years ago there were 300 or 400 looms in Ushak; now there are at least 2,000, which employ the entire female population of the place. Nearly every house has its loom, and whole families are employed in the manufacture. The men prepare the materials, cleansing and dyeing the wool; the women comb it, spin the yarn, and work at the frames. There is no weaving in Turkey carpets. The strands are arranged vertically on an upright frame, and are tied together with woollen yarns of different colours to form the pattern, then combed down tight, and clipped to an even surface. The women get about 3*d.* or 4*d.* a day, the children still less, the men about a franc. The dyes used are madder, cochineal, indigo, yellow berries, and copperas, but, for economy's sake, aniline dyes are sometimes introduced. The colours are fixed with nitric, sulphuric, or muriatic acids. The Koula carpets are of both long and short pile, but thinner in texture and brighter in colour than those of Ushak. The demand for them is very limited, and the manufacture is almost confined to rugs. Ghiordes, like Koula, manufactures few carpets, but rugs of very bright hues, except those which imitate the subdued tones of Persian carpets. Ushak carpets of the best quality are worth about 13*s.* the square yard in Smyrna; those of Koula, 10*s.* or 12*s.*; and of Ghiordes, about 14*s.* The average yearly export of carpets is about 2,500 bales, reaching 125,000*l.* in value. England takes two-thirds of this export.

THE subscriptions to the Art Union of Glasgow during the past year have been disappointing to the committee of management. The decrease has been mainly among the provincial and colonial subscribers. All societies of the kind depend mainly for success upon the attractiveness of the engraving which is offered. This year the Glasgow committee issued an etching after M. ISRAEL'S *Frugal Meal*. But, however pathetic in treatment and expensive to produce, this work is not Scottish in character, and the Glasgow Art Union has been always most successful when the subjects were most national. The committee would seem to have some difficulty in finding subjects to engrave. When the number of pictures of Scottish

subjects exhibited every year is considered, the difficulty is almost incredible. It is to be hoped the Glasgow committee in their search for popularity will not be led away by the bad example of the London Art Union in engraving namby-pamby and sensational paintings.

MR. E. C. ROBINS lately delivered a lecture on "Modern Hospital Construction." It has been printed as a pamphlet, with the addition of plans and other illustrations. It is sold for the benefit of the Parkes Museum, but the price is only a shilling—a sum which is out of proportion to the quantity of excellent information which Mr. ROBINS has supplied in the pages.

THE reports by Mr. ARMSTRONG on Continental systems of art-teaching have had the effect of inducing the Science and Art Department to recognise the importance of night classes for art in Board schools. An experiment is to be tried for two years, with payments for results on the scale allowed for second-grade art classes. A circular has also been issued by the Science and Art Department, stating that, in order to encourage modelling of a very elementary character and to save the expense of casting and transmitting works to the Department, an examiner will be sent to hold annual examinations, in classes having an average attendance of ten students. In addition to the payment of 40*s.* for sixty attendances a year, a payment of 20*s.* to 25*s.*, according to the merit of the exercise, will be made on account of any student who has been satisfactorily taught, and who has attended at least forty lessons during the year. Some of the provincial School Boards have decided that drawing is to be taught in evening classes at a penny a week.

MR. AIKMAN, R.S.A., offered good advice to the visitors to the Kirkcaldy Fine Art Exhibition, which was opened on Monday last, when he advised visitors to study a picture at a time, and to discover if possible what was the artist's motive in painting it. The ambition of sightseers is to "do" an exhibition straight off, beginning with No. 1 in the catalogue and going regularly through the numbers to the end. But no advantage can be derived from this process, and, in consequence, visits to galleries are, in many cases, little more than a waste of time. Mr. AIKMAN also warned people against paying too much attention to the critics who write in newspapers. It would, perhaps, have been better if he suggested that the criticism should be tested in the gallery. Some writers may express erroneous opinions on pictures, but, speaking generally, painters have reason to be grateful to journalists. Many an English painter owes his position to notices of his work in daily and weekly papers, and it is possible that Scottish artists are also occasionally indebted to the press.

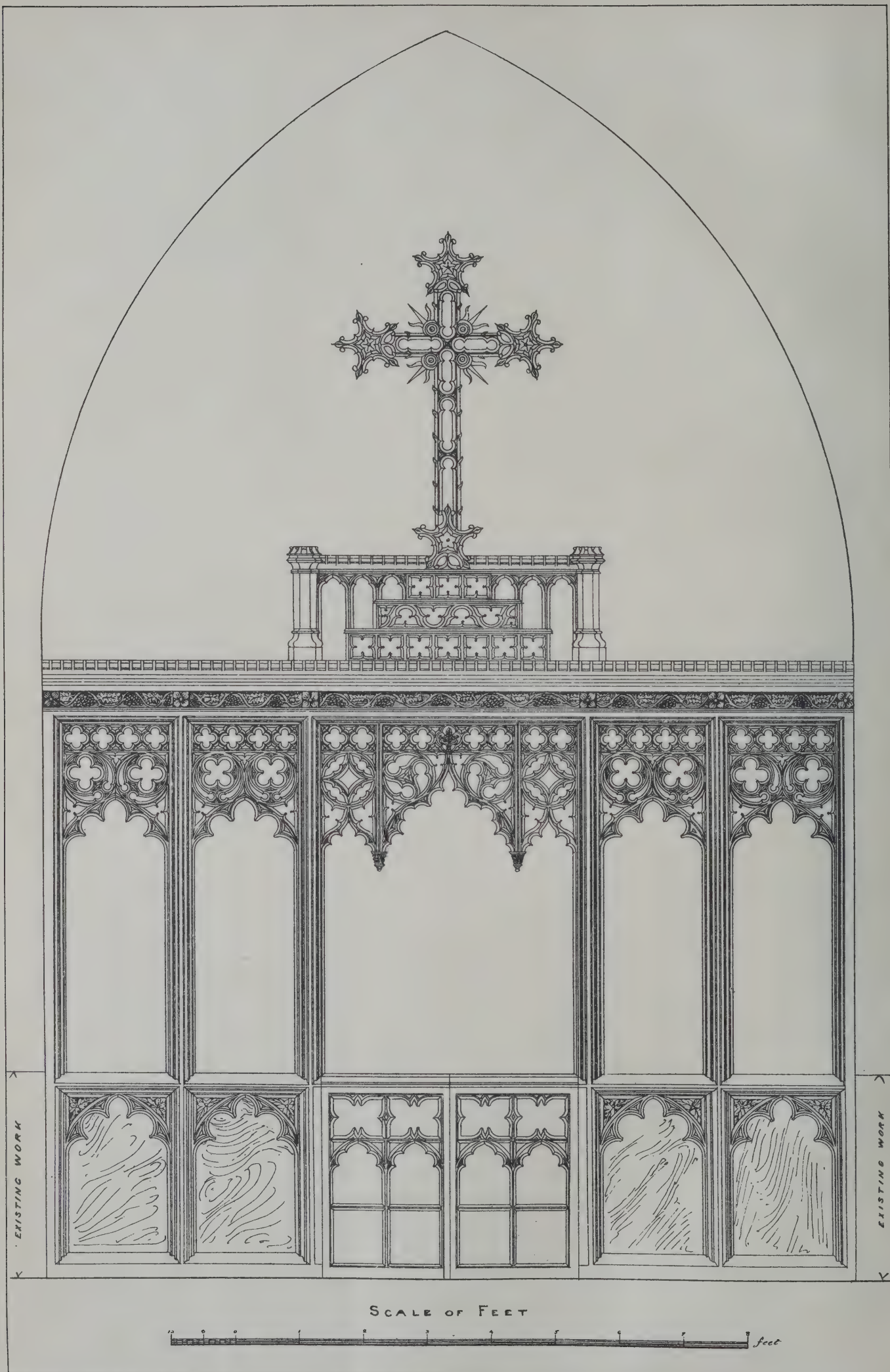
THE Manchester Art Gallery, which now belongs to the Corporation, has been enriched by some valuable presents. The first is Mr. HOLMAN HUNT'S *The Shadow of the Cross*, or as it is now called, *The Shadow of Death*, which is the gift of Messrs. AGNEW. It was painted in Jerusalem, and an immense sum was paid for it on its arrival in England. The picture was exhibited, and has been engraved in a costly form, but for some reason it was never so popular as some other works by Mr. HOLMAN HUNT. Another gift is Mr. VAL PRINSEP'S *The Golden Gate*—an Eastern woman standing against a gate, which is covered with Moorish ornament. Casts, drawings, engravings, and block prints have also been given, and a sum of 1,200*l.* has been already subscribed towards more purchases. The Corporation have resolved to be generous in their arrangements for the Gallery, so that all classes may be able to visit it at convenient hours.

THE session of the Birmingham and Midland Institute will commence on October 3, when an inaugural address will be delivered by Sir WILLIAM THOMSON. During the session there will be some lectures on art. The subjects are as follows: "Exotic Art," by Mr. J. H. CHAMBERLAIN; "The Public and Private Use of Sculpture," by Mr. E. W. GOSSE; and two on the "Gothic Revival," by Mr. WILLIAM MORRIS. In the archaeological section, of which Mr. TIMMINS is president and Mr. COSSINS secretary, there will be monthly meetings and exhibitions of collections.









ROOD SCREEN, CHURCH OF ST. LAWRENCE, ARDELEY, HERTS.

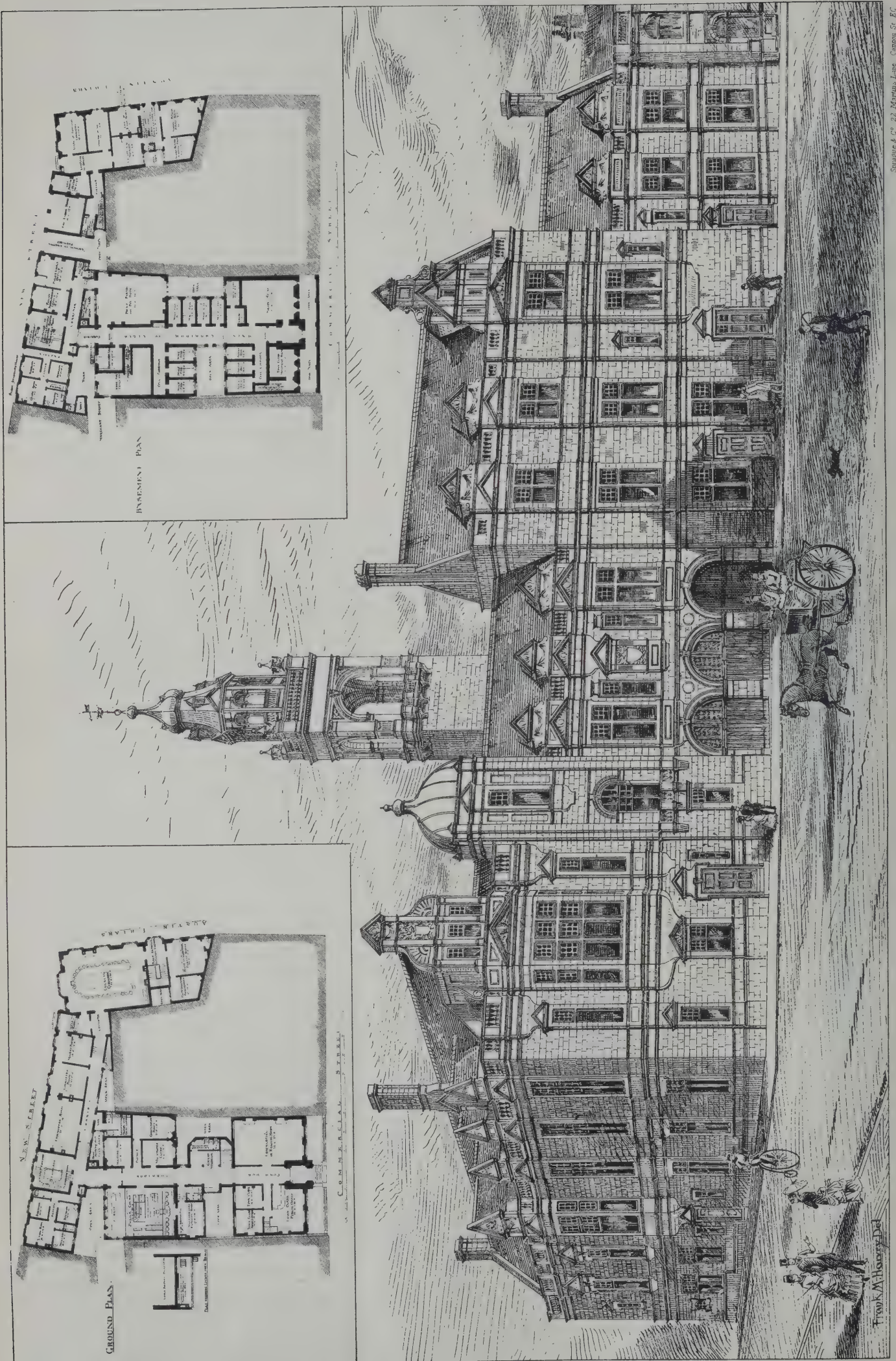
H. R. GOUGH, F.R.I.B.A. ARCHITECT.

Printed & Sold by 27, Mark Lane, London E.C.









PREMIATED DESIGN FOR MUNICIPAL BUILDINGS, NEWPORT.  
NEW STREET FRONT.

By THOMAS M. LOCKWOOD, ARCHITECT.







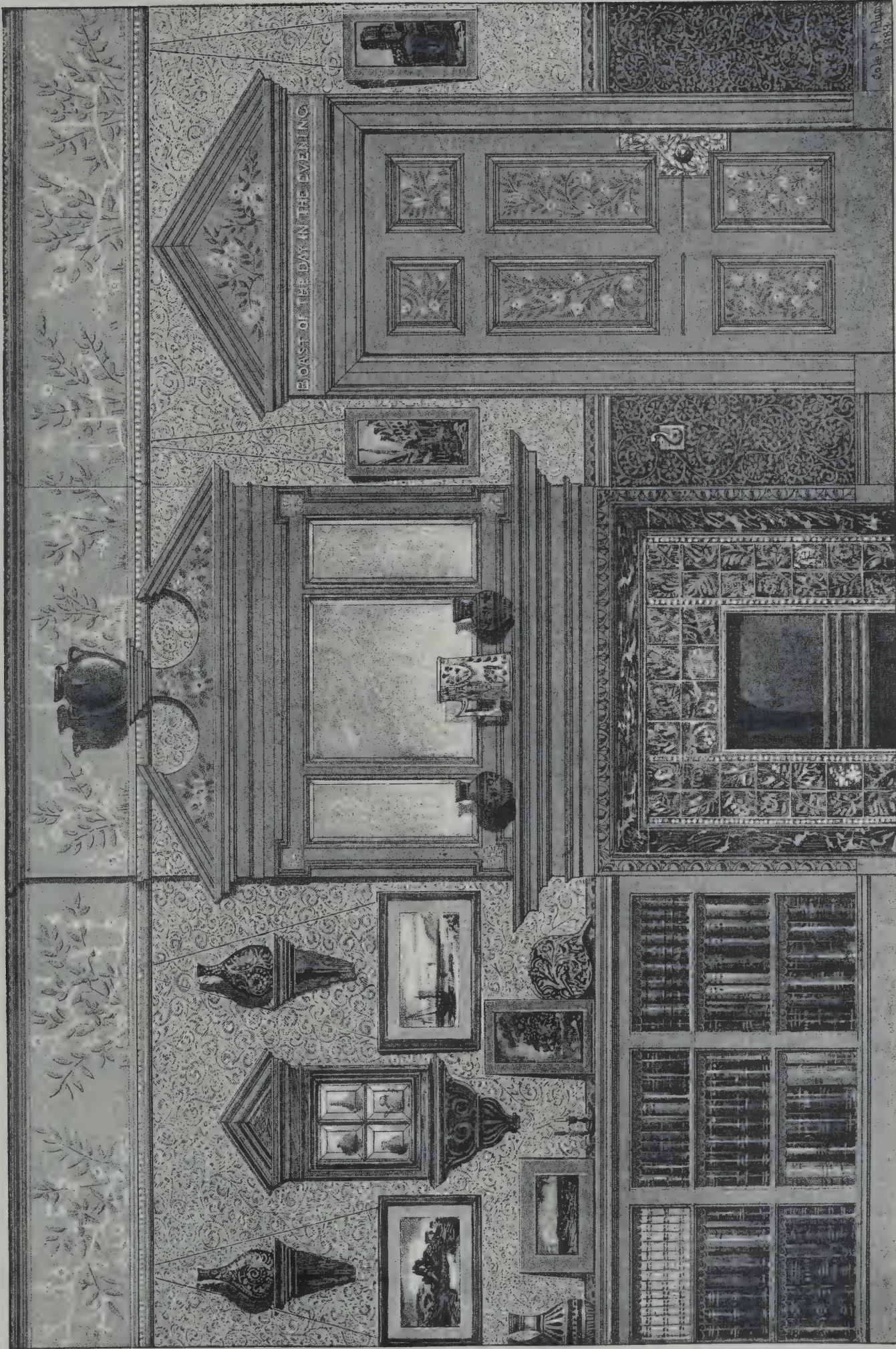


HOLY INNOCENTS SCHOOLS, FALLOWFIELD, MANCHESTER.

F H OLDHAM, ARCHITECT.

INK-PRINTED BY SPRAGUE & CO, LONDON.





BOUDOIR DECORATION.  
Designed by COLE A. ADAMS, FRIBA

INK PHOTO, SPRAGUE & CO. LONDON.









PREMIATED DESIGN FOR MUNICIPAL BUILDINGS, NEWPORT  
COMMERCIAL STREET FRONT.

By THOMAS M. LOCKWOOD, ARCHITECT



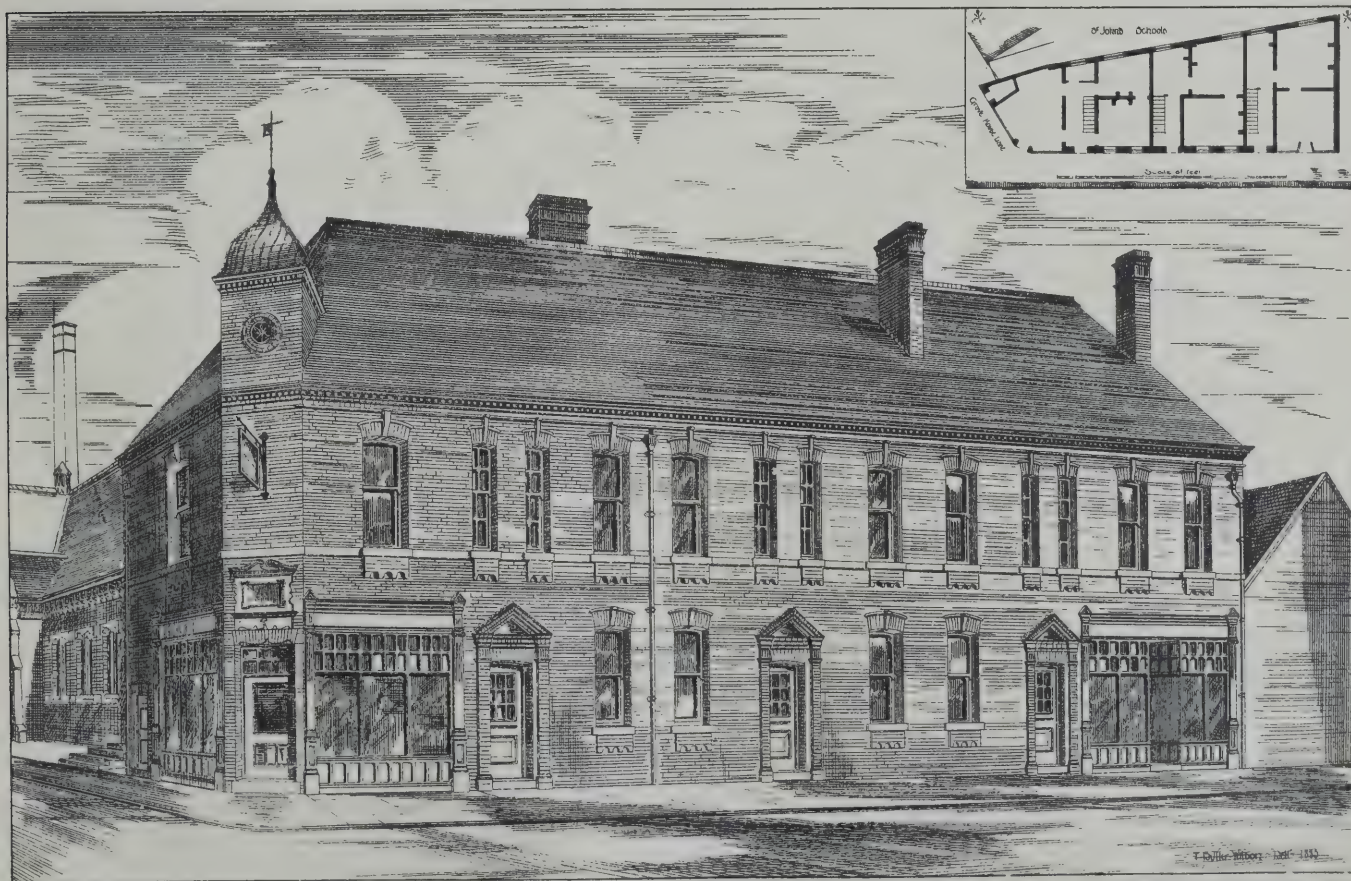






DESIGN FOR A BANK.

By ARNOLD B MITCHELL



HOUSES & SHOPS, CLAY PIT LANE, LEEDS.

JAMES WILSON, ARCHITECT







## ILLUSTRATIONS.

BOUDOIR DECORATION.

THE original coloured drawing from which our illustration is taken was exhibited in the Royal Academy last season. It shows the woodwork throughout painted a rich sombre green, enriched in parts with flowers in red; the frieze, a pale green-blue, with sprays of flowers and leaves in dead gold and straw-colour, the cornice and picture-rail being picked out in harmonising tints; the wall filling-in, a ground of pale vellum-colour, with scroll pattern in warm dull yellows heightened with gold; the dado in deep-toned red, with the scroll-work in a lighter tone of the same colour. The design is by Mr. COLE A. ADAMS, F.R.I.B.A.

HOLY INNOCENTS' SCHOOLS, FALLOWFIELD, NEAR MANCHESTER.

THESE schools have been erected from designs sent in competition. Built of Yorkshire parpoints, with red sandstone dressings to harmonise with the church near which they are situated, they form therewith a picturesque group seen from the main road, up to which the schools extend. The school and class-rooms are so arranged as to be convenient for Sunday and daily use and also for all kinds of entertainments, the class-rooms being well placed to answer the purpose of cloak and retiring-rooms. The school is capable of seating over 400 people. The cost, including a platform capable of enlargement into a stage and proscenium, is 3,500*l*. The building was erected from the design of Mr. F. H. OLDHAM, F.R.I.B.A., 23 John Dalton Street, Manchester.

The sites for the schools and adjoining church were given by the late Lord EGERTON.

NEW TOWN HALL, NEWPORT, MON.

THE subject of these illustrations is a design sent in competition some time since, with about forty others, for the municipal buildings at Newport, Mon. The motto was "Caerleon," and the author, Mr. THOMAS M. LOCKWOOD, of Chester, to whom was awarded the second premium, the first being given to Mr. E. A. LANSDOWNE, of Newport, Mon.

After some little delay these two gentlemen were appointed joint architects, and the works are now being carried on by them, the general arrangement being the same as shown on the plans now illustrated, some slight changes having been made in the elevation towards Commercial Street.

The irregularity of the site, and the difference of levels, presented some considerable difficulties, but a glance at the plans will show that these have been fairly overcome and a good arrangement secured with plenty of light and air.

The basement plan contains the police-offices and thirteen cells, immediately behind the Commercial Street front, the difference of level from front to back, about 10 feet, admitting of the entrances to this department on the level of Dock Street.

The remainder of frontage to Dock Street and Austin Friars is devoted to fire-engine house, prison attendant's house, and various offices for nuisance inspector, cemetery clerk, School Board, &c.; the exigencies of the site also demanded an entrance to be left for access to premises in the rear originally terminating at the old line of street.

On the ground floor, accommodation is obtained for the municipal offices, with entrance from front and back streets, the council chamber, 42 feet by 30 feet, being placed at the angle of Dock Street and Austin Friars, having public entrance and gallery accessible from the latter.

The police-court is placed where shown on the plan, with entrance for public from Dock Street, and for magistrates and officials from the main street, the communication with the cells below being by a flight of steps from the basement leading directly into the dock.

The assembly-room is placed on the first floor over police-court and offices, occupying a space of 62 feet by 35 feet; it is 28 feet in height, and has two main entrances by means of broad stone stairs from the two streets before named, besides special entrances to the platform, and retiring-rooms for ladies and gentlemen adjacent.

The first stone of the building was laid in July last, and the works are being executed by Mr. JOHN LINTON, of Newport, whose tender, amounting to 23,121*l*., was the lowest.

The whole of the dressings to the lower streets, and the

entire front, with the tower in Commercial Street, is being executed in stone from the Grinshill quarries, near Shrewsbury.

The warming and ventilating arrangements are being carried out by Messrs. HADEN & SON, of Manchester and Trowbridge; the fireproof construction by Messrs. DENNETT & INGLE, of Whitehall, London; and the locks and special ironmongery by Messrs. CHARLES SMITH & SONS, of Birmingham, under the superintendence of Messrs. LOCKWOOD & LANSDOWNE, joint architects.

HOOD SCREEN, ST. LAWRENCE, ARDELEY.

THIS screen has recently been completed, and is, with the exception of the lower panels and gates, from the design of Mr. HUGH ROUMIEU GOUGH, F.R.I.B.A. It is worthy of remark that the carving of the whole of the tracery has been very ably executed by the Rev. JAMES SANDERSON, the fitting and carpenter's work being done by Mr. W. DARBY. The oak was supplied by Mr. LAWRENCE, of Datchworth.

HOUSES AND SHOPS, CLAY PIT LANE, LEEDS.

THE illustration shows a terrace of houses lately erected from the designs of Mr. WILSON, architect, Leeds.

DESIGN FOR BANK.

THIS student's design was submitted in the late competition for the TITE Prize at the Institute.

## PETER CORNELIUS.

IN these days of testimonials, and memorial busts, and statues of dead and living celebrities, says the *Times*, it is not a matter for surprise that the impending centenary of the birth of Peter von Cornelius is looked forward to in Germany as an opportunity for all manner of artistic pomp and circumstance. The painters of Berlin intend to hold high festival on the occasion, and there is little doubt that other cities of the Fatherland and of Austria will follow the example of the imperial capital. Vienna possesses in Hans Makart an artist whose talent is essentially of the decorative kind, and whose designs for a recent historic procession have met with less severe criticism than his colossal canvases; the Düsseldorf Artists' Club "Mahlkasten" is at least as famous for its delightful *fêtes* and garden parties in a locality hallowed by the memories of Goethe and the Jacobis as for the historic pictures painted by its members. And what more appropriate subject for the display of their gift could the painters of Düsseldorf, where Cornelius was born, or of Munich, where he created some of his noblest works, desire than the celebration of the father of modern German art? To that name Cornelius is entitled in more than one sense. It was he who, in conjunction with Overbeck—a man of more intense although much narrower genius than himself—originated that revival of painting which, although reviled and laughed at by Heine and innumerable other critics less witty, survived the scoffers, and ultimately became the germ of all that is likely to survive of contemporary German art. The "Nazarite" or "clerico-romantic" German painters who took up their abode in an old Roman convent, and astonished natives and visitors by their frescoes in the Casa Zuccari and the Villa Massimi, have been likened to the Pre-Raphaelite Brethren who revolutionised the art of this country many years afterwards, and there is no doubt a certain parallelism between the two phenomena. Both movements started in violent opposition to academic conventionalism, which they combated by an appeal to nature and to the Mediæval representatives of a thorough-going, albeit unconscious realism. Overbeck and his friends were, indeed, expelled the Academy of Vienna, just as the walls of Burlington House knew not the pictures of Rossetti until death had removed him from the sphere of rivalry and contention.

With this essentially negative feature the affinities of the two schools cease, and differences of the most vital kind meet the eye of the careful observer. The German painters, although they thundered against the frivolity and want of spiritual depth in Rubens and Correggio, never showed real sympathy with their early Italian models. Even Overbeck, ascetic as he was, could not withdraw himself from the influence of the Renaissance. His draperies and his poses were founded upon those of Raphael—the early Raphael, it is true—and, like that master, he clothes his saints in the togas of Roman senators. The introduction into Biblical subjects of Eastern costumes after the manner of Mr. Holman Hunt would have appeared to him irreverent, if it had occurred to him at all. Whatever in him and in Cornelius is Mediæval is German, not Italian. And even this German Mediævalism is less pronounced in the two founders of the school than in some of their followers, as, for example, in Rethel, one of the greatest draughtsmen modern Germany has produced, although



the quaintness of some of his designs foreshadows the madness which finally clouded his genius. Again, the Pre-Raphaelites were essentially colourists; the colour of the Germans was as abominable as their draughtsmanship was exquisite; in most of their frescoes they spoiled the beauty of their cartoons. Cornelius, more especially, was a master when he had pencil or charcoal in his hand; as soon as he took up the brush he sank below the level of the scene-painter. It may finally be pointed out that the sympathy with religious subjects which with our English school was of a superficial and merely artistic kind became the life-breath of some of the German masters. Overbeck, in his life as well as in his work, was a Mediæval ascetic of the most rigorous kind. The spirit of classical art he abhorred, and its form he tolerated only on the same principle as the children of Israel, "employed the gold and silver vessels which they brought with them out of Egypt in the service of the true God in His Temple, after melting them down and consecrating them anew." To this length of religious fervour Cornelius, however, declined to follow his great friend. His love of the beautiful was not confined to one creed or one country, and at the bidding of the art-loving Crown Prince, afterwards King Ludwig I., of Bavaria, he was quite prepared to cover the walls of the Glyptothek with the glories of Zeus and the wrath of Achilles. But in spite of his classical leanings, Cornelius was never at home among the gods of Olympus. He remained a German and a Christian painter. This becomes at once apparent if one compares the frescoes of the Munich Glyptothek with those in the Ludwigskirche of the same city, or, better still, with the cartoons for them, which are in the Berlin National Gallery. Here the subject is thoroughly congenial to the artist, and the terrors and hopes of Christian revelation have seldom been rendered in a more impressive and at the same time strictly reverential manner than in the *Last Judgment*, said to be the largest, as it certainly is one of the most powerful, frescoes in existence. The acme of Cornelius's religious art was reached in the designs for the Royal Mausoleum or Campo Santo of Berlin, which have never been executed in colour, and remain, perhaps for that reason, the finest and most representative specimens of the master's style. The scale of these compositions was intended to be as colossal as their idea was comprehensive and full of meaning. The pictures were to be divided into groups of three, and the entire series was to embody the victory of Christ over death, spiritual and physical, and many of the most important episodes of the New Testament. The variety of pictorial resource, the grandeur and depth, and the beauty of some of the compositions place these cartoons among the foremost achievements of modern art. In the *Apocalyptic Horsemen*, more especially, dramatic power of the highest kind is displayed. Cornelius never surpassed—never, indeed, equalled—this design. The great scheme remained unaccomplished at the painter's death; the sketches for all the pictures are extant, and some of the cartoons were finished in detail and on a large scale. Perhaps the empire of Germany will complete what royal Prussia left undone. No nobler monument to the artist's genius could be erected than to transfer these designs to the walls of a great national building and to carry the painting out in a better style, perhaps, than he himself would have been capable of.

By his own countrymen Cornelius is classed among the greatest painters of all times, but international art history is not likely to endorse this verdict. His grave deficiencies as a colourist, the occasional hardness of his design, and a certain want of grace, although national rather than individual faults, will always be felt by those who look upon art as an embodiment of beauty rather than of thought and scholarship. His position as the unrivalled head of the modern German school he owed to his personal no less than to his artistic qualities. Overbeck lived the life of a recluse. The hours which he could spare from his religious observances he spent in his studio, surrounded by a few admiring disciples. Cornelius was a man of the world, fond of society, and an excellent talker. He loved Italy and Italian life, and from among the Italian people he chose a wife at an age when most men have done with the hopes and pleasures of existence. His mental faculties remained unimpaired to the day of his death, and few people who heard him talk in his lively, excited manner, on his art or literature, or, it might be, the rhythm of a tarantella which he had seen the peasants dance in Capri, would have suspected that they were listening to one who was all but an octogenarian, and had passed through such a career of work and excitement. Unlike most painters, moreover, Cornelius took a keen interest in contemporary events, and held, or was suspected to hold, strong political views of his own. During the famous "conflict" between the Prussian Diet and Bismarck a very scurrilous drawing appeared in one of the Conservative papers, showing the president of the popular Chamber in an anything but dignified attitude. This rumour assigned to the pencil of Cornelius, with how much truth we are unable to say. It will be seen that the biographer of Cornelius, whose task, in spite of numerous attempts, remains unaccomplished, will have an interesting problem to deal with. In the meantime the Germans are fully justified in delighting to honour the memory of a painter who was remarkable alike for his individual genius and for the impetus which that genius gave to the art of his country.

## RECENT BUILDING IN NEW YORK.\*

THE new departure is an apt name for what some of its conductors describe as the new "school" in architecture and decoration. It has still, after nearly ten years of almost complete sway among the young architects of England and of the United States, all the signs of a departure—we might say of a hurried departure—and gives no hint of an arrival, or even of a direction. It is, in fact, a general "breaking up" in building, as the dispersion of Babel was in speech, and we can only and somewhat desperately hope that the utterances of every man upon whom a dialect has suddenly fallen may at least be intelligible to himself. From a "movement" so exclusively centrifugal that it assumes rather the character of an explosion than of an evolution not much achievement can be looked for. In fact, the "movement" has not, thus far, either in England or in the United States, produced a monument which anybody but its author would venture to pronounce very good. Not to go back to the times when Gothic architecture was vernacular in England, it has produced nothing which can be put in competition with the works either of the English Classical revival, or with the works of the English Gothic revival—with St. Paul's and the Radcliffe Library, on the one hand, or with the New Law Courts and the Manchester Town Hall, on the other. Before the "movement" began, the architects of Europe and America were divided into two camps. They professed themselves either Renaissance or Gothic architects. The Mediævalists acknowledged a subjection to certain principles of design. The Classicists accepted certain forms and formulæ as efficacious and final. They were both, therefore, under some restraint. But the new movement seems to mean that aspiring genius shall not be fettered by mechanical laws or academic rules, by reason or by revelation, but that every architect shall build what is right in his own eyes, even if analysis finds it absurd and Vitruvius condemns it as incorrect.

"Queen Anne" is a comprehensive name which has been made to cover a multitude of incongruities, including, indeed, the bulk of recent work which otherwise defies classification, and there is a convenient vagueness about the term which fits it for that use. But it is rather noteworthy that the effect of what is most specifically known as Queen Anne is to restrain the exuberances of design. Whoever recalls Viollet-le-Duc's pregnant saying, that "only primitive sources supply the energy for a long career," would scarcely select the reign of Queen Anne out of all English history for a point of departure in the history of any one of the plastic arts. The bloated Renaissance of Wren's successors, such as is shown in Queen's College and in Aldrich's church architecture in Oxford, was its distinctive attainment in architecture. The minute and ingenious wood-carving of Grinling Gibbons was its distinctive attainment in decoration. Nothing could show more forcibly the degeneracy of art at the period which of late years has been represented as an æsthetic Renaissance than the acceptance of these wood-carvings, which in execution and all technical qualities are as complete, and in design and all imaginative qualities are as trivial and commonplace, as contemporary Italian sculpture, as works of art comparable to the graceful inventions of Jean Goujon, and clearly preferable to the sometimes rude but always purposeful decoration of Mediæval churches.

The revivalists of Queen Anne have not confined their attentions to the reign of that sovereign. They have searched the Jacobean and the Georgian periods as well, and have sucked the dregs of the whole English Renaissance. Unhappily, nowhere in Europe was the Renaissance so unproductive as in the British Islands. It was so unproductive, indeed, that Continental historians of architecture have scarcely taken the trouble to look it up or to refer to it at all. Not merely since the beginning of the Gothic revival, but since the beginning of the Greek revival that was stimulated by the publication of Stuart's work on Athens, in which for the first time uncorrupted Greek types could be studied, what contemporary architects have ransacked as a treasury was considered a mere lumber-room, and fell not so much into disesteem as into oblivion. During two generations nobody any more thought of studying the works of English architecture, from Hawksmoor to "Capability" Brown, than anybody thought of studying the poetry of Blackmore and Hayley. The attempt within the past ten years to raise to the rank of inspirations the relics of this decadence, which for years had been regarded by everybody as rather ugly and ridiculous, is one of the strangest episodes in the strange history of modern architecture.

Mr. Norman Shaw has been the chief evangelist of this strange revival. Mr. Shaw is a very clever designer, with a special felicity in piquant and picturesque groupings, which he had shown in Gothic work, especially in country-houses, before the caprice seized him of uniting free composition with Classic detail, and the attempt at this union is what is most distinctively known as Queen Anne. Whoever considers the elements of this combination would hardly hope that the result could be a chemical union, or more than a mechanical mixture. Classic detail is the outcome and accompaniment of the simplest con-

\* From an illustrated article by Mr. Montgomery Schuyler in *Harper's Magazine* for September.



struction possible, which was employed by the Greek architects in the simplest combination possible, and precisely because it was so simple and so primitive they were enabled to reduce it to an "order," and to carry it to a pitch of purity, lucidity, and refinement to which the most enthusiastic Mediævalist will scarcely maintain that more complicated constructions have ever attained. But this very perfection, which was only attainable when life was simple and the world was young, this necessary relation between the construction and the detail of Greek Doric, makes it for ever impossible that Greek detail should be successfully "adapted" to modern buildings. The latest and strongest of the writers on the theory of architecture has said of Greek architecture: "As partisans of its historical glory we should desire that it remain for ever in its historical shrine." We laugh at the men of two generations ago who covered Europe and America with private and public buildings in reproduction as exact as they could contrive of Grecian temples. But, after all, if the Greek temple be the ultimate, consummate flower, not only of all actual but of all possible architectural art, were not these men wiser in their generation than their successors who have taken the Greek temple to pieces and tried to construct modern buildings out of its fragments? There is even something touching and admirable, in this view, in the readiness and completeness of the sacrifice to beauty which the reproducers of the Greek temples made of all their merely-material comforts and conveniences, something that we miss in the adapters. The Romans can scarcely be said to have attempted this adaptation. They built Roman buildings for purposes and by methods which had never entered the minds of Greek architects to conceive, and they built them with no more thought of art than enters the mind of a modern railway engineer in designing a truss bridge. After they were designed according to their requirements the Roman engineer overlaid them, or, according to some conjectures, employed Greek decorators to overlay them, with an irrelevant trellis of Greek architecture, debasing and corrupting the Greek architecture in the process. And it is this hybrid architecture, which analysis would at once have dissolved into its component parts, that was accepted without analysis as the starting-point of "the new departure" of the fifteenth century, and the ultimate English debasement of which in the eighteenth is taken by the contemporary architects of England and America as the starting-point of the new departure in the nineteenth. It cannot be said that Mr. Norman Shaw and his followers have succeeded in the task of combining free composition with Classic detail, which the Romans forbore to attempt, and in which the French architects of the sixteenth century failed. Every attempt to fit antique detail to a building faithfully designed to meet modern requirements shows that it cannot be so fitted without being transformed, and—since the sole excuse for the attempt is that it cannot be bettered—without being debased. What the Queen Anne men have done is virtually what the Romans did. They have shirked the impossible problem they unnecessarily imposed upon themselves, and have either overlaid or inlaid their buildings with their architecture. Of course the result of this process can no more be accepted as an architectural organism than if they had hung waterproof paper on the outer walls instead of decorating them with carving or moulding or what not, built in the walls, but no more architecturally related to them than the paper-hanging. But this is precisely what has been done in every "free Classic" building, with more or less skill and dissimulation of the process.

However, to disparage Queen Anne is not to explain its acceptance. It looks like a mere masquerade of nineteenth-century men in eighteenth-century clothes, and with many of its practitioners it is no more. In England it seems to have originated as a caprice by which a clever and dashing but by no means epoch-making architect misled the younger and weaker of his brethren. In this country, which has never been much more architecturally than an English colony, there seemed special reasons for following the new fashion of being old-fashioned. American architects, and American builders before there were any American architects, had been exhorted, as they have lately been exhorted again, to do something distinctively American. The colonial building, which was done by trained English mechanics, was of the same character as the contemporary domestic work of England, and showed in its ornament the same unreflecting acceptance of a set of forms and formulæ bequeathed as a tradition of the trade and part of the outfit of a journeyman. Although Jefferson complained that in his time and in rural Virginia it was impossible to "find a workman who could draw an order," it is evident that there was no difficulty of that kind in other parts of the country. These trained workmen, it is to be noted, were all carpenters, and there is probably no work in stone which shows an equal precision and facility in workmanship. Such buildings as the New York City Hall and the Albany Academy were clearly the work of architects of culture according to the standard of the time. The only architectural qualities of the works of the mechanics were the moderation and respectability of detail, which they had learned as part of their trade, and it is quite absurd to ascribe to these buildings any value as works of art. It is particularly absurd to assign the degradation of house-building which undoubtedly followed, and which made the typical American house, after the Greek temple

had spent its force, the most vulgar habitation ever built by man, to the substitution of book-learned architects for handicraftsmen. People talk as if the middle part of Fifth Avenue, the brown-stone high-stoop house with its bloated detail, which displaced the prim precision of the older work, had been done by educated architects. In fact, there was probably not a building put up in New York after the design of an educated architect between the works we have mentioned and the erection of Trinity Church by Mr. Upjohn in 1845, which not only marked a great advance over anything that had been done before, but began the Gothic revival to which we directly or indirectly owe whatever of merit has been done since, including so much of Queen Anne as, not being Queen Anne, is good. But the bulk of the building which gave its architectural character to New York and to the country continued to be done by mechanics, who continued, so far as they could, to supply the demand of the market, who gradually lost the training their predecessors had enjoyed, and who lost also all sense of the necessity for that training in the new demand that their work should be, above all things, "American." As the slang of to-day puts it, they were exhorted as the architects are still sometimes exhorted, to "talk United States." They might have answered that there was no such language, and that a few bits of slang did not constitute a poetical vocabulary. The feeling which urges an artist to be patriotic by being different from other people, not long ago led Mr. Walt Whitman to resent the absence of an "autochthonous" poetry, and has lately led a newspaper writer to call the attention of a New England building committee to the log cabin as the most suitable motive for a town hall they are going to build.

The Northern reader notes with mild amusement the occasional resentment in the Southern press of the absence of a "distinctive Southern literature," and perceives the plaint to be provincial; but he is not so quick to perceive that his own clamour for an American this or that is equally provincial. The hard lot of the American painter has lately been bewailed, in that, when he has tried to rid himself of his provincialism by learning to paint, and has learned to paint more or less as other men do who have learned to paint, he is straightway berated for not being provincial. If American literature or painting or architecture is good, the Americanism of it may safely be left to take care of itself. But a man cannot be expected to innovate to much purpose upon usages with which he is unfamiliar; and the effects which Mr. Whitman's admonition to his fellow-poets to "fix their verses to the gauge of the round globe" would probably have upon an aspiring young poet, conscious of genius, but weak in his parts of speech, are the effects which the demand for aboriginality actually had upon the race of builders, whether they were content with that title, or without any sufficient provocation described themselves as architects. They undoubtedly attained difference, and their works did not remind the travelled observer of any of the masterpieces of Europe. It is quite conceivable and not at all discreditable that the wild work of Broadway and of Fifth Avenue should have led architects of sensibility to cast many longings, lingering looks behind at the decorum of the Bowling Green and Washington Square, and to sigh for a return of the times when the common street architecture of New York was sober and respectable, even if it was conventional and stupid.

This justifiable preference for Bowling Green and Washington Square and St. John's Park over Broadway and Madison Square and Murray Hill, for an architecture confessedly colonial over an architecture aggressively provincial, is no doubt the explanation why so many of our younger architects made haste to fall in behind the Queen Anne standard. What we really have a right to blame them for is for not so far analysing their own emotions as to discover that the qualities they admired in the older work, or admired by comparison with the newer, were not dependent upon the actual details in which they found them. To be "content to dwell in decencies for ever" was not considered the mark of a lofty character even by a poet of the time of Queen Anne. If virtue were, indeed, "too painful an endeavour," and if there were no choice except between the state of dwelling in decencies and the state of dwelling in indecencies for ever, we could but admit that they had chosen the better part. But they were not, in fact, confined to a choice between these alternatives. The Gothic revival in England, after twenty years, had succeeded in establishing something much more like a real vernacular architecture than had been known in England before since the building of the cathedrals—an architecture which, although starting from formulas and traditions, had attained to principles, and was true, earnest, and alive. It was quite inevitable that it should be crude in proportion as it was alive, according to the frankness with which it recognised that we live in times unknown to the ancients, and endeavoured to respond with changes in its organism to changes wrought in its environment by new requirements and new knowledge, with forms necessarily rude, inchoate, embryonic, as beseems the formative period of letters and of arts as of life, in contrast with the ultimate refinement which is the mark of a completed development. But that these crudities would be refined was also inevitable; that they were in process of refinement was apparent. Another generation of artists as earnest as those who began the Gothic revival might have brought this rough and swelling bud to



a splendid blossom. But in an evil hour, and under a strange spell, the young architects of the United States followed the young architects of England in preferring the refinements of a fixed and developed architecture to the rudenesses of a living and growing architecture. Because they did not see their way at once to "supply every deficiency and symmetrise every disproportion," they did not leave this for their successors, but abandoned the attempt at an expression of the things they were doing for the elegant expression in antique architecture of meanings which have grown meaningless to modern men.

They have had their way in New York for seven or eight years, during a period unprecedented in building activity, and out of all comparison in the profusion with which money has been lavished upon building and decoration. What have they gained for architectural art? They have, indeed, subjected many miles of sandstone to the refining influence of egg and dart mouldings (the designer of a house in Fifth Avenue has so much faith in the efficacy of that ornament that he has belted his street front with three rows of it, one above the other), and triglyphs (faithfully to have contemplated which softens the manners nor suffers to be rude) have been brought within the reach of the humblest in the decoration of tenement houses. They have built so much and so expensively that they have produced in minds—like some of their own—which do not reflect much upon these things, the impression that if luxury and art are not synonymous, they are at least inseparably connected, with the latter in the capacity of hand-maiden. But will any educated architect assert that the characteristic monuments of the last five or six years, greatly superior in quantity, and superior by a great multiple in cost, are equal in architectural value to the work of the decade preceding? Suppose that Mr. Norman Shaw had not bedevilled the weaker of his brethren, and that this unprecedented building activity and this unparalleled spending of money that have fallen under the control of architects had been directed along the lines laid down by the Gothic revivalists, and had extended, consolidated, and refined the work begun and carried on here by such architects as Mr. Upjohn, Mr. Eidlitz, Mr. Withers, Mr. Cady, Mr. Potter, and Mr. Wight, will any educated architect maintain that the result of such a process would not have been nobler monuments than any to which we can point as characteristic products of the later movement?

### THE ROMAN HOUSE AT WHITESTAUNTON.\*

WHEN the society did me the honour of visiting Whitestaunton last year we were so fortunate as to discover the remains of a Roman house situate beside the stream which rises in the large fishpond, and flows down into the valley of the Yarty. The existence of the ruins of a villa in the immediate neighbourhood of the stream had long been suspected, owing to the frequent occurrence on its banks of minute fragments of an ancient kind of pottery and of stone split into thin sheets and cut into the shape of roofing-tiles. When the course of the high road was altered about forty years ago the ruins of a little room or chapel, roofed with these slabs and paved with *tesserae* of brick, were found standing over a clear spring in the wood, not far from the stream in question, and within a few yards of the back north wall of the house which has now been discovered. At the time of the society's visit we had not found much more than the sandstone pillars, which had supported the flooring over a hot-air chamber, some of the square, box-like flue-pipes which had let the warm air through the walls of the dwelling-rooms, a quantity of broken tiles, and the foundations and lower courses of some of the principal walls. A good deal of work was done in the course of last autumn and in the spring of this year, under the superintendence of Major Davis, F.S.A., who was so good as to direct the operations, which could hardly have succeeded at all without the benefit of his great experience in everything relating to Roman antiquities of this kind. The plan prepared by him shows the result of the excavations so far as they have at present proceeded.

The house was built under a steep hillside facing to the south, though the windows looking down the valley westwards must certainly have afforded the finest view. The bath-rooms were on the western side, and the principal living rooms were arranged round the *atrium* or covered court at the eastern end. The centre of the house was occupied by a furnace-room, probably adjoining the kitchen; and here were the boilers which supplied the warm bath and steam for the vapour-bath, taken in a heated chamber from which the bathers must have passed into a room containing the cold plunge-bath lying further to the east. The hot-room terminates in a semicircular recess, paved with square red tiles embedded in concrete, several lines of thicker tiles radiating from the centre of the room towards the curve of the recess, where they reached the wall and formed a support for the *solium* or bench where the bathers sat. On the further side of the furnace-room, flues and underground passages for hot air, lined with thick tile work, led to another semicircular room at the back, containing

a number of red sandstone blocks, intended apparently to support the fireplace, the doorway and a seat or projection from the wall, and towards the front to another room adjoining the *atrium*, where a huge slab of much discoloured sandstone marks the position of another large hearth or fireplace. One is reminded at this part of the excavations, if we may compare small things with great, of that vivid description of the ruins of the City of Legions, which we find in the "Welsh Journey" of Giraldus, where he tells us how Caerleon "was excellently built by the Romans with their walls of brick," and how even in his day were to be seen the traces of its former greatness, the giant tower and the palaces "aping the Roman majesty" with their roofs of antique gold, "and the traveller," he adds, "within and without the city finds underground works and pipes and winding passages and hypocausts, contrived with wonderful skill to throw the heat from little hidden flues within the walls." The *atrium*, or inner court, which was probably roofed in to escape the inclement weather of the "land of clouds and rain," was surrounded by a cloister or gallery, opening at the back upon a large archway, of which the ruins lie in a mass of masonry upon the floor. On the eastern side of the arch there is an alteration of level in the floor of the little cloister, and here there are remains of a step and a doorway and another slab of sandstone in the corner, which seems to indicate the position of another stove or fireplace. The cloister was evidently supported by pillars, of which two were found lying by the wall at the corners of the court, and another had been displaced and thrown to some distance beyond the outer wall. Owing to the dampness of the soil, which necessitates a tedious course of draining, we have not yet examined much of the flooring of the *atrium* and its surrounding cloister; but enough has been uncovered to show that the passage at least was floored with fine mosaic work, bordered with the pattern called the "double key," the cubes being made of terra-cotta, white lias, and the darker stone of the district, so as to afford a variety of colours in the pattern. The pavement of the large room between the outer wall of the *atrium* and the sloping wall shown on the plan appears from the few fragments left to have been of the same fine quality, the cubes measuring about a quarter of an inch on every side; in the other rooms and passages the pavement was of a rougher and coarser kind. On passing through the opening for the large archway we come upon three small rooms, paved with concrete, in which a few *tesserae*, about an inch every way in size, are still in position. Some parts of the wall retain pieces of the stucco or plaster, of a red or maroon colour, striped with white lines, with which the surface was originally covered. But the dampness of the soil led to the destruction of the greater part of the plaster work, which fell off in an almost fluid condition, when the stones were first exposed to the air. Mr. Wright, in his work on "The Celt, the Roman, and the Saxon," has observed a peculiarity of the Roman houses in this country, of which the middle room of the three last-mentioned affords a new illustration. "One room," he says, "has always a semicircular recess or alcove, and there is generally at each side where it joins the room an advancing piece of wall or pier, as though a curtain had been drawn across to separate the recess from the room." And, he adds, that it has been conjectured that this recess served as the *sacrarium* or place of domestic worship.

There are one or two other points about the building which seem to be worthy of observation. The construction of the arches appears to have been similar to that of the larger archway which Major Davis has discovered among the Roman ruins at Bath, the masons having for the sake of lightness used "brick wedge-shaped boxes open on two sides," set in a cement of lime and pounded tiles, and roofed in with a "roll and flat tile," or thin stones cut into a hexagonal shape. The stones of the east wall of the *atrium* are scored over with "diamond-broaching," like the masonry of Hadrian's wall. The tiles are of all sizes and shapes, some being flanged for roofing or for use in the hot-air flues, others being rounded for the ridges of the roof, which seems to have been made in part of stone flags and in part of the thick slate which is found at Wiveliscombe. The boxlike flue-tiles are pierced with square holes and scored with lines, so as to get a firmer hold on the mortar. In one or two places where the supply of red sandstone pillars had fallen short, some of these flue-tiles were filled with cement and set up on end so as to serve as supports for the floor. Several of the tiles show marks of footsteps impressed on them while the clay was wet, the marks in one case showing the nails of a man's boot, and in another the footstep of a large dog. There has not as yet been an opportunity of thoroughly examining the ground, the earth being left for some inches over the greater part of the floor; but some objects of interest have already been found, the list including several coins of the fourth century, part of a bronze brooch, part of a glass bowl, several pieces of the fine red Samian ware, a vast quantity of bones, and a number of broken articles of the black, red and grey pottery which was manufactured in Britain. Between the wall and the stream were found several large pieces of slag from the ancient ironworks which were carried on in the immediate neighbourhood, and a broken quern, or hand-mill, made of granite from Dartmoor; and lower down the stream, and hidden under its bank, lay a circular block of red sandstone, shaped like a truncated cone, and pierced with a square opening,

\* A paper read at the meeting of the Somersetshire Archaeological Society, by Mr. C. I. Elton, F.S.A.



which is said to resemble the stones used at the present day in Brittany for the manufacture of cider.

It is not easy, after the lapse of so many centuries, to realise the daily life of the Romans who farmed in our western valleys and hunted the wild boar and wolf through the oak forests of the Blackdown Hills. To bring the picture more vividly before the mind, I have found it useful to study the letters of Sidonius, the famous bishop of Auvergne, who was born soon after the Romans retired from Britain, and who lived to see the final triumph of the barbarian kings in Gaul. The description of his little country-house, built in a nook of the hills by the side of a mountain stream, has been of the greatest assistance to us in our exploration of the ruins of the villa at Whitestaunton. His house faced to the south and extended from a steep bank at the eastern end to a place where the stream fell into a broad lake on the other side of the garden. The trees on the bank overhung the roof of the baths, rising in tiled ridges to a central cone of metal. He describes the furnace-room with its intricate arrangement of lead pipes carried through the walls of the rooms for the warm baths and the vapour bath, the latter being fitted, as in our own example, with a paved semicircular recess containing the bather's bench. By the side of these rooms stretched a large hall, containing the plunge-bath, built square so as to allow plenty of room for the servants. The walls, he says, were of plain white plaster, but the ceiling was ornamented with metal-work which the people passing outside could see through the high bow-windows. Three arched doorways led into an open courtyard towards the west, where a perpetual stream splashed into a great stone basin, out of six brazen spouts in the shape of lions' heads. An entrance at the further corner opened into the dwelling-house close by the ladies' dining-room, and the wool-room and store-closets divided from it by slight partitions. Standing in front of these rooms, one looked across the *atrium* round which ran a narrow cloister, opening into a wide verandah on the side of the lake, and at the opposite or south-western corner running into a deep recess, where the servants held a nightly parliament of gossip when the family went upstairs to bed. The hall-door and vestibule took the centre of the southern front, and on the right of the entrance was the winter sitting-room, leading into a long wainscoted morning-room, with windows looking on the lake. A flight of steps led into the verandah below, where the guests used to sit and watch the boat-races and the fishermen dragging in the seine or setting their night lines for the lake trout. On the other side was a little sitting-room devoted to the mid-day siesta; and this led into the cool north parlour, near the point where our circuit commenced. The bishop delights in the country sights and sounds, the nightingale in the bush, the swallow twittering in the eaves, the sheep scattered on the hill-side, and the boys in the hayfield with their songs and rustic flutes. On the lawn stood two spreading lime-trees, where Sidonius and his friends used to play at tennis until the boughs grew thick and caught the balls, and so he concluded that he had lost his tennis-court and must use the place as an arbour for reading and playing backgammon. The sketch of his house and daily life is interesting in a high degree, and I hope that these short extracts from his letters may be of some use to us in our endeavour to realise the life of a country gentleman during the Roman occupation of Britain.

## EDINBURGH IN THE EIGHTEENTH CENTURY.

WHEN we look back to the Middle Ages, says a correspondent of the *Scotsman*, a century seems but a span. Its history is often compressed within a few lines. But a century is a long time on which to look back in the history of a modern city. In one sense, the last century seems longer than any similar period. It has been fuller of events. Progress has been more rapid, and change has been more thorough-going. During the past two or three generations the pace of life has been enormously accelerated, and therefore more ground has been traversed. With the introduction of the railway and the telegraph, followed by the telephone and the electric light, all the conditions and methods of life have changed, not always for the better. With these changes, there have also come changes in the ideas and expectations of men regarding life as a whole, and regarding the manners and customs of which it is largely made up. It does not admit of doubt, for example, that the Edinburgh of the middle of the nineteenth century differs very much more from the Edinburgh of 1750 than the Edinburgh of 1750 differed from that of 1650, or even from that of 1550. One century is of exactly the same length as another in respect of time, but one may differ very greatly from another in respect of social change and material progress. It is hardly too much to say that, judged in this way, Edinburgh has traversed a greater distance during the last hundred years than during any four or five previous centuries.

That this is true of its physical dimensions is capable of easy demonstration. In 1750, the city of Edinburgh covered little more than the top and the sides of the ridge that slopes steeply down from the Castle to Holyrood House. It occupied an oblong or coffin-shaped area, measuring no more than one mile in length,

and from a quarter to a half mile in breadth. The whole area within the city walls, with the addition of the Canongate, did not extend to more than half a square mile. In 1850, the city covered an area of six and a half square miles. That is to say, within the century its area was multiplied thirteen-fold. Sufficiently exact data do not exist for making a comparison of the population at different periods—at least, before the beginning of the present century. We do know, however, that within the present century the population has increased more than three-fold. In 1801 it was 66,000, in 1871 it was 196,000, and in 1881 it was 228,000. The disproportion between the increase in area and the increase in population is striking. It is due, of course, to the large proportion of single or self-contained houses in the New Town and also in the suburbs.

Still more remarkable have been the changes on the face of the city—in its features as distinguished from its size—and also in its social life. Seldom, indeed, has there been such an opportunity as the case of Edinburgh affords for contrasting an ancient with a modern city, by placing them side by side within a period of a few years. The reason is, that the transition from the old to the new period in the history of the northern metropolis was made, not gradually, but by a sudden leap. All at once the city burst the bounds within which it had been pent up for centuries, and spread itself over the surrounding fields. It was like the letting out of water when the embankment of a great reservoir gives way. The breach is quickly enlarged by the outpouring stream, and the underlying plains are soon flooded. Down till 1760, or thereabout, Edinburgh was still an old-fashioned city, differing very little from the Edinburgh of the days of Queen Mary and John Knox. It may be said to have retained its Mediæval character for two centuries after the rest of the country and the other large towns in it had put on a modern dress.

For this state of matters there were two reasons. The one was that the royalty of the city was still confined within its ancient walls. The necessity for expansion had been felt; but it had been met by extending the town, not laterally, but perpendicularly. Hence the block of houses—

Piled deep and massy, close and high,

with which the old ridge is covered. Hence the tall tenements in the High Street and the Canongate, six and seven, and sometimes twelve and thirteen storeys high, which have led strangers to remark that the streets are built vertically one on another.

The second reason for the "cabined, cribbed, confined" character of the old city was the physical nature of its site. It covered a hill between two deep valleys, the one of which was impassable, while the other could not be crossed without great inconvenience. First the valley had to be descended through dark alleys and narrow lanes on the one side, and then a corresponding ascent had to be made on the other. It was this question of access, undoubtedly, that stood in the way of the enlargement of the city. When it was solved, as we shall presently see, the old city sprang into new life.

It is interesting to dwell on the aspects of the town as a Mediæval survival, retaining its old-world flavour in quite modern times. The town itself, indeed, did not differ so greatly from its present appearance as did its surroundings. The trough of the valley on the north side was filled by the Nor' Loch, which extended for half a mile from the West Kirk glebe to the Physick Gardens. The sloping fields on the other side of the loch were called Barefort's or Bearford's Parks, and were used for grazing purposes. Half way up the slope—on the line of Princes' Street—a straggling road, called the Lang Gait, ran from Moutrie's Hill to Drumsheugh Toll. Between the Lang Gait and the Water of Leith there was nothing but green fields and woods, some farm-houses, and a few country mansions. These were then rural, if not quite outlandish, regions. Gentlemen riding on horseback in the Lang Gait were sometimes stopped by highwaymen in broad day. On Wood's Farm—the site of Queen Street—there was excellent shooting of partridges and hares, while snipe and woodcock might be got by going over to the low-lying grounds around Canonmills Loch. In the east of this region was the little borough of Broughton, truly a deserted village. Leith was a distant seaport, between which and the capital a coach ran twice a day, occupying one hour in the journey each way.

On the south side of the city the vacancy was not so absolute. Three roads ran out into the country from the city gates, and along these rows of houses and cottages were built on both sides for a quarter of a mile. But the intervening spaces were occupied with farms and orchards and market gardens. Practically, therefore, the city was still confined within its narrow limits. There the rich and the poor, the learned and the unlearned, the fashionable and the vulgar, the merchant and the artisan, the lord of session and the hungry clerk, jostled one another in the courts and lanes and narrow streets of the Canongate and the Lawnmarket. In the tall tenements which reared their dusky heads to the sky, the artisans and the petty tradesmen occupied the lowest and the highest storeys, and between them the merchants and the lawyers were content to dwell.

The tenancy of an upper flat was even deemed a mark of gentility. Major Topham, who visited Edinburgh in 1774, tells a



good story of an Edinburgh merchant who, on going to London, selected rooms for himself in the top flat of a lodging-house. When his London friends remonstrated with him for living in such a place, he replied, "I ken very weel what gentility is, and when I have lived all my life in a sixth storey, I am not come to London to live on the ground."

The houses, however, were not all in flats. Many of them were handsome and elegantly-furnished self-contained dwellings. In the main thoroughfares and in the adjoining courts there were family mansions of the nobility, which were equally striking in their external architecture, and tasteful and solid in their internal decorations. Moray House, in the Canongate, is a fine specimen of an old baronial mansion. The houses of the Regent Morton, the Marquis of Tweeddale, Cardinal Beaton, the Earl of Leven, Archbishop Sharp, the Earl of Orkney, and other nobles and gentles testify to a former grandeur which contrasts strangely with the squalor which now surrounds and infests them. In many of these houses, now occupied by the poorest of the population, there are, or there were lately, ornamental ceilings, and mantle-pieces, and wainscottings, which seem so sadly out of place as to suggest only the precious jewel in the head of the toad.

THE LATE MR. C. N. TRIPP.

MR. C. N. TRIPP, F.R.I.B.A., who died lately at the early age of thirty-eight, was, says the *Gloucestershire Chronicle*, a pupil of Messrs. Medland & Son, of Gloucester, and whilst in their office he obtained the National Medallion for success in the art competition. He commenced independent practice about eleven years ago, and was the architect of many public and private buildings in and around the county of Gloucester. Amongst others may be mentioned the "Raikes" Memorial Church, Gloucester (St. Paul's), which he obtained in a public competition. A perspective drawing of this work, now approaching its completion, was exhibited in the Royal Academy in 1881. He was the architect for the restoration of the ancient church of Hinton, Hants, and additions to the rectory; the vicarage of All Saints' Church, Gloucester; the Board Schools, Cirencester; extensive works at Edgworth Manor, Cirencester, the residence of Mr. Francis James, and three lodges; corn and malt warehouses at Gloucester Docks; the Pier View Hotel, Sharpness; the premises for the Gloucester Club in Westgate Street, and, within the last few months their new premises at the Bell Hotel; the premises for the Gloucester Conservative Club, which are not yet completed; and many private dwellings. The deceased gentleman led an energetic life, and was deservedly popular, and he will be greatly regretted by all who knew him. His distinguished ability as a draughtsman was the more remarkable from the fact that he only had the full use of his left hand.

NEW LEGAL STANDARD WIRE-GAUGE.

THE following table has been issued by the Standards Department of the Board of Trade. It will be seen that it differs from the Birmingham, Lancashire, and Whitworth gauges, which have hitherto been adopted in this country :—

Descriptive Number. B. W. G.	Equivalent in parts of an inch.	Descriptive Number. B. W. G.	Equivalent in parts of an inch.
No. 7/0	0.500	No. 23	0.024
6/0	.464	24	.022
5/0	.432	25	.020
4/0	.400	26	.018
3/0	.372	27	.0164
2/0	.348	28	.0148
0	.324	29	.0136
1	.300	30	.0124
2	.276	31	.0116
3	.252	32	.0108
4	.232	33	.0100
5	.212	34	.0092
6	.192	35	.0084
7	.176	36	.0076
8	.160	37	.0068
9	.144	38	.0060
10	.128	39	.0052
11	.116	40	.0048
12	.104	41	.0044
13	.092	42	.0040
14	.080	43	.0036
15	.072	44	.0032
16	.064	45	.0028
17	.056	46	.0024
18	.048	47	.0020
19	.040	48	.0016
20	.036	49	.0012
21	.032	50	.0010
22	.028		

A ROMAN TURRET.

A PAPER was read by the Rev. Dr. Bruce at the last meeting of the Newcastle Society of Antiquaries, upon "An Exploratory Turret of the Roman Wall near Magna Caervoran." He said: Having heard last week that a mile-castle had been discovered on the wall in the vicinity of Greenhead, and that it was likely to be speedily removed, Dr. Hodgkin and I went last Friday to make inquiries respecting it. Captain Coulson of Blenkinsop Castle kindly met us at the Greenhead station and took measures for our being able comfortably to accomplish our mission. Instead of a mile-castle, as we had supposed, we found that it was an exploratory turret which had been exposed; this was to a certain extent an agreeable surprise, for although we have several mile-castles on the wall, in a tolerable state of preservation, we have but two turrets, and both of these have been but recently brought to light through the exertions of Mr. Clayton. It may be well here to quote Horsley's account of these turrets. He says: "The smaller turrets (in Latin, *turres*) have been more generally and entirely ruined than the *castella*; so that 'tis hard to find three of them anywhere together with certainty. The distance between two, where it was thought surest, was measured and found to be near fourteen chains or three hundred and eight yards. It therefore seems most probable that there have been four of these between every two *castella*, at equal distances from the *castella*, and one another; for thus five intervals will just amount to seven furlongs, the usual or mean distance between the *castella*. And this scheme answers with a good deal of exactness to the situation of all the turrets that have yet been discovered. These exploratory turrets, or watch-towers, seem to have been only about 4 yards square at the bottom. And by placing sentinels at each of these, who must be within call of one another, the communication quite along the wall might be kept up, without having recourse to the fiction of a sounding trumpet or pipes laid under ground, from one end of the wall to the other." The two turrets to which we have referred as having been recently exposed are situated, the one at East Brunton and the other on the Black Carts Farm near the Limestone Bank. Both are in an encouraging state of preservation. There are traces of another turret to the west of the station of Amboglanna (Birdoswald), but they are so slight that few explorers will notice them. This new turret stands on the top of the cliff which forms the western extremity of the great basaltic dyke over which the wall runs for about ten miles in the central part of its course. The cliff is about 100 feet above the plain to the north, and as it descends rapidly to the west a most extensive view is obtained to the north, the south, and the west. It must have formed a good look-out station. The north wall of the turret is standing eight courses of stones high, and measures 5 feet 9 inches. Its side walls are nearly as high, and they are 3 feet 2 inches thick. The width of the turret (inside measurement) 13 feet 6 inches. The south wall has not yet been cleared of the rubbish which has encumbered it for ages, so that its full dimensions could not be ascertained. During the course of excavation numerous bones of animals were, as usual, found, one of them being the lower jaw of a young boar. One or two specimens of embossed Samian ware were turned up together with fragments of a wine amphora and other species of pottery. In the southern face of the wall, near the turret, has been found an inscribed stone, which, however, is scarcely legible. The first line seems to read COH. III., the second line we could make nothing of, though we tried hard. I have already said that this turret, or stone sentry-box as we may call it, stands upon a basaltic cliff, the last in a westerly direction of the Nine Nicks of Thirlwall. The cliff is now being quarried, and largely supplies the towns and cities to the east and west of it with paving-stones. Should the quarrymen proceed right on, the turret will soon be undermined and disappear; already its north-west angle has fallen. It is probably not too much to suppose that upon a proper representation being made to them the lessees of the quarry will, out of regard to the interests of antiquarian science and respect to the labours of men whose arms have been nerveless these seventeen centuries and more, spare the turret, and direct their operations to other quarters. Our excellent secretary, Dr. Hodgkin, was thoughtful enough to bring some photographic plates to bear upon the building, which, if the wind was not too strong to render the operation successful, will enable our members to form an idea of the existing state of the building; but, under any circumstances, as soon as the south wall is excavated and the whole interior made clear, it will be well if our secretary, Mr. Blair, who serves us so diligently and so well, will bring his art as a draughtsman to bear upon it, and to give us a correct representation of it. A good engraving will be of value to a late posterity. Horsley observes that in his time it was hard to find two or three turrets anywhere together with certainty, and he also states, as we have seen, that they have been more generally and entirely ruined than the mile-castles. The wall and all its appurtenances was, in the dark ages, the prey of spoilers whenever stone was wanted; as the turrets projected from the wall, and, though very substantial, were less so than the mile-castles and the wall, and were the first to be removed. Horsley is generally very accurate in his statements and worthy of the utmost



reliance; still, it is desirable that we had the means of verifying his statement as to the distance between the turrets. I have reason to know that when Mr. Clayton discovered the turret on the Black Carts Farm, and cleared the wall for a considerable distance to the westward of it, he caused diligent search to be made for any traces of a turret, but without success. The impression made upon the minds of those of us who watched the proceedings was that the distance between the turrets was really greater than Horsley supposed. I would like much that diligent search should be made on the line of the wall to the east of the newly-discovered turret, to see if some trace of another cannot be found so as to set at rest the question to which I have referred.

### "OWEN JONES" PRIZES.

THE Council of the Society of Arts have awarded the prizes which, as trustees of the sum of 400*l.* presented to them by the Owen Jones Memorial Committee, they offer for designs for household furniture, carpets, wall-papers, hangings, damasks, chintzes, &c., regulated by the principles laid down by Owen Jones. Each prize consists of a copy of "The Principles of Design" and a bronze medal. The following are the successful candidates for 1883: Wm. H. Woodall, West London, design for tiles; Thomas Barrett, Macclesfield, design for silk hangings; James Fletcher, Glasgow, designs for carpets; J. G. Jeffrey, Coalbrookdale, design for an Italian majolica drug-pot; Thomas J. Donohoe, Macclesfield, design for an embroidered silk cover; Constantine Procopides, Manchester, design for surface printing.

### AN AUSTRALIAN BUILDING CASE.

A CURIOUS case has been heard in the Supreme Court of Melbourne by Mr. Justice Williams. The plaintiff, Mr. John Bailey, a contractor, sued the defendant, Mr. Alfred D. Hart, for false imprisonment. Bailey had entered into a contract with Hart to erect for him some houses at South Yarra. Disputes occurred as to the delay in completing the contract, and as to the quality of the materials supplied. The architect cancelled the contract, but the plaintiff remained on the works. He refused to leave when requested to do so by the defendant, and he was then given into custody for wilful trespass. He was taken to the city watch-house, but was immediately released on his own bail, and next day the charge against him was dismissed. The contract made certain provisions for its determination by the architect on certain contingencies, and also for reference to arbitration of any matters in dispute. The dispute as to the contract was referred to two arbitrators, who, not being able to agree, appointed an umpire. Their decision was that the plaintiff should pay the defendant a sum of about 260*l.* and costs, and the question as to the legality of this award is still pending. The plaintiff brought an action against the defendant to recover damages for false imprisonment, and the jury, after hearing the evidence, gave a verdict for the plaintiff for 1,000*l.* Defendant applied for a new trial on the grounds of the improper reception of evidence, of there having been misdirection, and of the damages being excessive. The lately overruled the objections as to the reception of evidence and as to misdirection. But it was suggested to the parties that they might agree as to the damages, and, with the view of their arriving at a settlement, the formal decision was postponed. The parties would not agree to terms, and Mr. Justice Williams therefore gave the final judgment of the court.

His Honour said that the court had already delivered judgment on all the grounds for a new trial except on that of the damages being excessive. That had been left open with the hope that counsel on both sides would have adjusted the matter. They had, however, been unable to agree, and it therefore became necessary for the court to give judgment. There was no doubt that this being an action of tort, it was a difficult question for the court to deal with. It was generally a question for the jury what damages should be given, but if the jury were influenced by improper motives, there was no doubt that the court could interfere and rectify the verdict of the jury. In this case it was perfectly clear that the jury had not been influenced by any improper motives, but the damages were so large that the court might infer that the jury had made some mistake in assessing them. In *Lambkin v. The South Eastern Railway Company of Canada*, 5 Appeal Cases 352, there was an appeal from the Court of Queen's Bench in Canada directing a new trial. But it was stated by the Privy Council that where it appeared that some mistake must have been made, a new trial would be granted. In the present case the damages given were so large as to lead to the inference that some mistake was made. The imprisonment was of very short duration, and it was clear that the defendant was not influenced by any personal malice against the plaintiff, nor did the plaintiff allege in his declaration or prove by his evidence that he suffered any special damage. The damages appeared to be out of all proportion to the merits of the case. However, there was no doubt that the arrest of the plaintiff was altogether unnecessary, and that it

would have been more advisable to proceed against him by summons. The court, however, was now driven to the necessity of forming some estimate as to what damages should be given to the plaintiff. In estimating this amount, of course, they should go on the principle of allowing the jury great latitude as to damages in an action of tort, where there was no measure of damage. He personally thought the amount fixed by the court large, but acting on the principle he had referred to, if the jury had awarded that sum as damages it was difficult to see how it could have been disturbed. The court had decided to direct a new trial unless the plaintiff agreed to reduce the damages to 400*l.* If he consented, the rule for a new trial would be discharged without costs; if he did not consent, the rule would be made absolute, with costs, for a new trial, each party to pay his own costs of the first trial.

### CHURCH BUILDING AND RESTORATION.

**Manchester.**—On Saturday the Hon. Miss Egerton laid the foundation-stone of the new church of St. Mark, Newton Heath. The church, which has been designed in the Early English style, and will seat over 500, comprises nave, 70 feet by 30 feet, with narrow aisles used simply as passages; chancel, 33 feet long by 23 feet wide, with apsidal end; north and south transepts, clergy and choir vestries, and organ chamber at the north-east corner. The baptistery is an octagonal extension at the west end, in combination with the two main entrances. There is a third porch at the south-east end. The church is lighted by a large window at the west end, over baptistery arch; in chancel, by five two-light tracery windows, and an extra window near the ceiling, to throw light on to the pulpit. The aisles have four double windows on each side and the transepts, besides the north and south windows, which are somewhat similar to those last named, have in the gables four large circular tracery windows. Externally the church has one wide roof, spanning both nave and aisles, and continued on in one line to apsidal termination, broken only by an oak bell cot placed over the chancel arch. The transepts have their roofs running parallel with the nave, and at the west end the lean-to roofs of the porches, with the octagonal baptistery between, break the great height of the main gable. By keeping the nave and aisles under one roof, a much higher nave arcade than usual is obtained. This is in six bays, the piers of which are of stock brickwork, with the splays carried round arches. The materials used are bricks, white ends inside and out, with stock and terracotta dressings, from Mr. Jabez Thompson, of Northwich, and blue slates, principals and other timber work in red deal. The foundations have been already put in by Mr. Robert Carlyle, at a cost of 416*l.*; this sum was considerably over the contract, owing to the great extra depth it was necessary to go in order to obtain a solid bed. The contract for the superstructure, excluding the seating, has been let to Messrs. Cordingley & Stopford for 2,776*l.* Messrs. Tate & Popplewell, of Manchester, are the architects.

**Edale.**—It is intended to build a new church in the pretty little valley of Edale, Derbyshire, to replace the existing structure, which is a square, barnlike building, totally out of character and quite out of place in the midst of the beautiful scenery that surrounds it. The design for the new church has been prepared by Mr. William Dawes, architect, of Manchester. It is picturesque in outline, and will form a pretty feature among the hills that overlook the small village of Grindsbrook.

**Brighton.**—The committee of Queen's Square Church, North Street, Brighton, viewing the serious condition of the stonework of which the fabric is constructed, have called in the services of Mr. Arthur Loader, architect, of Brighton, and that gentleman has prepared specifications and plans for entirely removing the Caen stone casing, windows, &c., and re-executing the work in picked Corsham Down stone, at an estimated cost of a little over 2,000*l.*, and the work is to be proceeded with forthwith. A bazaar on a grand scale, to assist the fund for the object, will shortly be held in the Royal Pavilion.

**Llanglydwen.**—Llanglydwen Church, Pembrokeshire, was reopened by the Lord Bishop of the diocese on the 24th ult. The fabric consists of the nave, 36½ feet long by 17½ feet wide; chancel, 18 feet long by 13½ feet wide; to which have now been added a porch and vestry on the south side, the former measuring 5½ feet square, and the latter 11 feet by 8 feet. The ground has been lowered in places round the building, thus developing its proportions, and at the same time rendering the walls drier, and enabling sufficient ventilation to be provided. New windows of Douling stone frames and tracery have been inserted, two single lights in each of the north and south nave walls and two-light ones in the west and east ends, the latter being filled with stained glass by Clayton & Bell. Red terra-cotta crosses, manufactured by Doel, of Bridgend, have been placed on the eastern gables of nave and chancel, and a stone one on the western bell gable, which otherwise has not been altered. The western entrance has been blocked up, its flight of internal steps removed, and the new Douling stone arched doorway provided within the south porch with outer and inner doors of pitch pine, fitted with wrought iron.



work from Messrs. Brawn's Birmingham Art Metal Works. The whole of the open seats, chancel stalls, communion-table, altar rails, pulpit, and lectern are in varnished pitch pine, from the architect's special designs, Messrs. Brawn supplying the wrought-iron altar standards. Wooden platforms are placed under the seats, the best of the old slate pavement being laid down the centre of the passages, and bordered with an encaustic tile zig-zag, provided by Messrs. Webb, of Worcester, who also supplied the tile floor in the porch, chancel, and sacristy. The old Norman font-bowl and stem have been carefully cleaned and set on a new base. The walls throughout have been plastered internally, and the nave roof-timbers very much improved in character and design. The chancel arch and its roof woodwork have not been altered, but it is hoped that funds may be found to improve these some day. The fireplace that used to be in the Dol-wylim high-backed pew has, like the pew itself, of course been cleared away. None of the walls are the ancient ones, in fact there is nothing old but the font and a monumental cross in the churchyard. The builders were Messrs. Evans & Blethyn, of Penclipin; and the architect Mr. E. H. Lingen Barker, of London, Hereford, and Tenby.

### NEW BUILDINGS.

**Birmingham.**—In connection with the covering over of the Smithfield Market and the widening of St. Martin's Lane, a large block of buildings has been erected in the latter thoroughfare, extending from Jamaica Row to Moat Lane, so as to form a suitable front to the vegetable market. The buildings, which are from the designs of Messrs. Osborn & Reading, architects, Bennett's Hill, are designed in the style of the English Renaissance of the Stuart period, and are constructed of red brick with red terra-cotta dressings. At each end of the St. Martin's Lane front are circular turrets, with conical roofs, flanked by ornamental gables, and in the centre is a gable with octagonal turret on each side. The main entrance to the markets is in the centre of the St. Martin's Lane front, and consists of a central roadway for carts and waggons, 15 feet wide and 24 feet high, together with a wide entrance on either side for foot passengers. The main piers supporting the large archway are of stone, but the arch itself is constructed of terra-cotta, richly moulded and carved. Over the archway will be two sculptured figures in red terra-cotta, representing *Flora* and *Pomona*. The whole of the carving and sculptured work has been executed by Mr. John Roddis. The archways are fitted with massive wrought-iron gates, manufactured by Messrs. Hart, Son, Peard & Co. The Jamaica Row front and about one-third of the St. Martin's Lane front are occupied by the new Woolpack Hotel, which will stand as nearly as possible upon the same site as the old Woolpack. The hotel is entered from St. Martin's Lane by a wide hall, having a staircase which leads to the upper floors. On the left of the entrance there is a commodious smoking-room, and on the right a large bar, 18 feet wide by 36 feet long, with an entrance at the Jamaica Row corner of the building. The other end of the Jamaica Row front is wholly occupied by a large luncheon and dining-room, the dimensions of which are 39 feet by 23 feet, and in which there will be a bar extending the length of the room. On the basement, also, there is a large luncheon bar, and a grill-room, 39 feet in length by 34 feet 6 inches in breadth, entered by a staircase leading down from the doorway at the extreme end of the Jamaica Row front. On the first floor, and fronting to Jamaica Row, there is a dining-room, measuring 24 feet by 43 feet, with serving-room and lifts. The remainder of the first floor is occupied by a coffee-room, 28 feet 6 inches long by 18 feet 3 inches wide, and a commercial-room, both fronting into St. Martin's Lane. The kitchens, larders, &c., of the hotel are on the fourth or uppermost floor, and are spacious and lofty. On the remaining floors there are bed and sitting-rooms, thirty-six in number; bath-rooms, and other conveniences. On the left of the large entrance to the markets has been placed the market superintendent's office, which has a staircase communicating with his house, on a portion of the first and second floors. The remaining portion of the St. Martin's Lane front is occupied by large shops, with show-rooms on the first floor, and well-lighted basements extending underneath the footpath. The various lettings in the building are all divided by fireproof floors and walls, and the floors of the kitchens are constructed of fireproof materials. The contractor is Mr. Frederick J. Briley, of Coventry Road, Small Heath.

### ENGINEERING WORKS.

**Bangor Waterworks.**—The works for the water supply of Bangor, co. Down, have been commenced. The reservoirs will provide storage for 24,000,000 gallons of water, equal to 240 days' supply for 5,000 inhabitants, at 20 gallons per day for each. The pipes will be laid along the county road to the town, for a distance of about two miles. Mr. W. H. Campbell has taken the contract for the works, which have been planned by Mr. Henry Chappell, C.E.

### GENERAL.

**Mr. D. Birkett, F.R.I.B.A.**, delivered a lecture, in Carlisle, upon architecture on Wednesday last.

**A Design by Messrs. Matthews & Mackenzie, of Aberdeen**, was awarded the first prize in the competition for the Elgin town hall.

**A New Theatre** is about to be erected in Warrington from the designs of Messrs. Pierpoint & Adams.

**Mr. W. Lister Newcombe, F.R.I.B.A.**, has prepared designs for the new Eye Infirmary, which is to be erected in St. Mary's Place, Newcastle-on-Tyne.

**Stable Buildings**, on an extensive scale, are to be erected at Monkwearmouth by the North-Eastern Railway Company.

**Mr. Joseph Hamblett, of West Bromwich**, has been awarded a diploma of honour and gold medal at the Amsterdam Exhibition for his terra metallic blue bricks, copings, ridges, &c.

**Mr. H. T. Gradon, of Durham**, having been successful in the competition, has received instructions to prepare plans and specifications for the cemetery chapel, lodge, and gates at Southwick. There were eighteen competitors.

**A Court-house** has been erected at Church, Lancashire, for the divisions of Church, Oswaldtwistle, and Clayton-le-Moors. The cost of the building has been over 6,000*l*. Messrs. Waddington & Son, of Burnley and Manchester, are the architects.

**The Chapel of Wittenberg Castle**, which is associated with the early history of the Reformation, is now being restored. Slender octagonal pillars will be introduced to support the interior. The graves of Frederick the Wise and John of Saxony will remain where they are, but many of the monuments will have to be transferred to the walls of the choir. The free niches will be filled with statues of the contemporaries of the two great reformers. The roofs and windows will be coloured, the altar, seats, chancel, and organ will be restored in carved oak, and the round tower at the west front will be raised.

**Professor Valentine Ball** has been appointed Director of the Museum of Science and Art in Dublin.

**An Electric Tramway** is about to be constructed between Newry and Bessbrook, a distance of seven miles.

**A New Station** is in course of erection at Brighton from the designs of Mr. H. E. Wallis. The roof, which has an area of about 100,000 square feet, is glazed on the Helliwell system.

**Baths and Washhouses** are to be erected in Shoe Lane, Dublin, from plans by the city architect. Messrs. Dudgeon Bros. are the quantity surveyors.

**M. Chevreul**, the chemist, who has in a book on colour and in other publications shown the relation between art and science, celebrated his ninety-eighth birthday on August 31.

**From a Parliamentary Return** just issued, it appears that the total amount of house duty charged on houses in the metropolis in the year ending April 5 last was 797,891*l*. The parishes which were assessed most heavily were: Kensington, 68,219*l*; St. George, Hanover Square, 60,975*l*; St. Mary, Islington, 54,015*l*; St. Marylebone, 49,163*l*; Paddington, 47,219*l*; St. Pancras, 44,950*l*; St. Mary, Lambeth, 43,856*l*; St. Giles, Camberwell (including Peckham and Dulwich), 30,229*l*; St. John, Hackney, 28,909*l*; and St. James, Westminster (including the Verge of the Palaces), 23,719*l*.

**The Liverpool Autumn Exhibition** of works by modern artists was opened to the public on Monday at the Walker Art Gallery. There are, including 39 pieces of sculpture, 1,636 works on view, as compared with 1,589 last year. These have been selected by the hanging committee from 3,585 works.

**Messrs. T. & R. Boote** have supplied the interior and exterior tiling for the new coffee palace in Corporation Street, Birmingham. The tiling of the arches in the basement is unique in character, and the whole work redounds much to the credit of the Waterloo Potteries.

**Mr. George Woodhouse**, architect, of Bolton, died on the 3rd inst. He was one of the architects of the town hall, and enjoyed a large practice in Lancashire.

**The Restoration** of the Saxon Tower at Earls Barton has been commenced.

**A Contract** has been let for constructing the foundations for the colossal statue of *Liberty* at New York. The price to be paid for the concrete is 3 dols. 37 cents per cubic yard.

**The Newcastle City Council** have resolved to appoint a committee to confer with the River Tyne Commissioners, for the purpose of ascertaining the feasibility of constructing a ship canal connecting Newcastle and district with the Solway Firth. It was stated that such a canal would be of great commercial advantage to the Tyne. The committee will report the result of their inquiry at a future meeting.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, SEPTEMBER 8, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C.; not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—  
"Contract Supplement to THE ARCHITECT."*

### EDITORIAL NOTICES.

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### APPOINTMENTS VACANT.

**HINCKLEY.**—Sept. 12.—Applications are required by the Local Board for the Appointment of a Surveyor. Salary not exceeding 125*l.* per annum. Mr. Thomas Moss, Clerk to the Local Board, Castle Street, Hinckley.

**STEYNING.**—Sept. 18.—Applications are required by the Rural Sanitary Authority for the Appointment of a Surveyor. Salary 120*l.* per annum. Mr. E. Cripps, Clerk, Board Room, New Shoreham.

### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**DUBLIN.**—Designs are invited for the Museum of Science and Art, National Library Buildings, &c. The Secretary, Office of Public Works, Dublin.

**LEISTON.**—Plans are required for the Erection of Twenty Almshouses, not to cost more than 180*l.* each. Mr. C. P. Ogilvie, Leiston, Suffolk.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

**OLDHAM.**—Oct. 1.—Plans for Schools for the Union, to Accommodate 120 Boys, 120 Girls, and 60 Infants. The building to be a separate one, in an enclosed area, to contain three schoolrooms, dormitories, baths, kitchen, with cooking arrangements; dining-hall to hold 500 persons, to be arranged so as to be usable for religious service; and four sitting-rooms and four bedrooms for officers. Mr. J. W. Mellor, Oldham, Clerk to the Board.

### CONTRACTS OPEN.

**BACKWORTH.**—Sept. 19.—For Additions and Improvements to Passenger Station. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

**BANGOR.**—For Works in Erection of Large Buildings. Messrs. T. Nelson & Co., Tregarth, near Bangor.

**BARNSELEY.**—For Building Detached Cottage, Keresford Hill. Mr. William Fisher, Estate Office, Wentworth Castle.

**BEDFORD ROW.**—Sept. 8.—For Repairs to Property. Mr. W. A. Holcombe, Gray's Inn Chambers, Holborn.

**BRADFORD.**—Sept. 8.—For Building Seven Houses in Manningham. Mr. T. C. Hope, Architect, 27 Kirkgate, Bradford.

**BELFAST.**—Sept. 10.—For Erection of Orange Hall in Clifton Street, according to plans by Mr. W. Batt, Architect, 4 Wallington Place.

**BERWICK-ON-TWEED.**—Sept. 10.—For Partial Rebuilding and Repairing River Retaining Wall. Mr. Macgregor, Surveyor, 40 Castlegate, Berwick-on-Tweed.

**BICKINGTON.**—Sept. 10.—For Building Vicarage House and Offices. Mr. R. Medley Fulford, Architect, The Close, Exeter.

**BRADFORD.**—Sept. 11.—For Building Warehouse and Shop, Bridge Street. Mr. Samuel Jackson, Architect, 33 Kirkgate, Bradford.

**BUENOS AYRES.**—Sept. 17.—For Delivery for Shipment of about 1,400 tons of Wrought and Cast-Iron Work in Floor Plates, Manhole Frames and Covers, Roofs, Doors and Window Frames, Girders, Rolled Joists, &c., according to Specification by Mr. J. F. Bateman, C.E. The Argentine Minister, London.

**CARDIFF.**—Sept. 14.—For Boundary Wall and Stone Staircase, Ely Schools. Mr. C. E. Bernard, Architect, 16 Crockherbtown, Cardiff.

**CARLOW.**—Sept. 10.—For Chancel to Staplestown Church. Mr. J. F. Fuller, Architect, 179 Great Brunswick Street, Dublin.

**CHELTENHAM.**—Sept. 8.—For Wrought-Iron Footbridge, 135 feet long; 66 tons of Cast-Iron Columns and Girders, Gratings, Rolled Joists, for Extension of Waterworks according to Specifications by Mr. J. F. Bateman, C.E. Mr. E. T. Brydges, Town Clerk, Cheltenham.

**CHICHESTER.**—Sept. 10.—For Construction of Sluices, Sluice Culverts and Works in Connection. Mr. A. S. Hammond, C.E., Palace Chambers, Bridge Street, Westminster.

**CORNHILL-ON-TWEED.**—Sept. 8.—For Additions to Beaumont Presbyterian Church. Mr. James Stevenson, Architect, Berwick-on-Tweed.

**CREWE.**—Sept. 8.—For Erection of a Church at Crewe according to Plans by Messrs. Paley & Austin, Architects, Lancaster. Tenders to be sent to the Architects.

**CROSS HILLS.**—Sept. 10.—For Alteration and Enlargement of Wesleyan Sunday-school. Mr. A. H. Dawson, Cross Hills, near Keighley.

**DEVON.**—Sept. 15.—For Extensions to the College at Shebbear. Mr. James Crocker, Architect, Exeter.

**DEWSBURY.**—Sept. 13.—For Enlargement of St. James's Mission Room, Flatts. Messrs. John Kirk & Sons, Architects, Dewsbury.

**DROGHEDA.**—Sept. 15.—For Works at St. Mary's Church. Mr. J. F. Fuller, Architect, Brunswick Chambers, Dublin.

**EDINBURGH.**—Sept. 10.—For Construction of Wet Dock. Messrs. Blyth & Cunningham, C.E., 135 George Street, Edinburgh.

**ELLAND.**—Sept. 8.—For Additions and Alterations to Woodside Mill. Messrs. Horsfall & Williams, Architects, Post Office Buildings, Halifax.

**FENTON (STAFFS.).**—Sept. 11.—For Erection of Buildings at Gasworks according to Plans by Messrs. G. W. Stevenson & Son, Westminster. Mr. C. Adderley, Public Offices, Fenton.

**GAD'S HILL.**—Sept. 14.—For Building Eight Cottages. Messrs. Sandall, Corderoy & Selley, Surveyors, 19 Queen Anne's Gate, Westminster.

**GLASGOW.**—Sept. 8.—For Supply of 700 tons of 24-inch and 18-inch Cast-Iron Pipes and Special Castings required in Connection with the Formation of an Additional Service Reservoir near the Village of Milngavie. Mr. Gale, the Engineer, Waterworks Office, 23 Miller Street, Glasgow.

**GLASGOW.**—Sept. 8.—For Construction of an Additional Service Reservoir, Milngavie. Mr. Gale, Engineer, Waterworks Office, 23 Miller Street, Glasgow.

**GLASGOW.**—Sept. 13.—For Supplying and Fixing Heating Apparatus and Washing and Drying Appliances for Baths and Wash-houses, Weaver Street. Mr. John Carriock, City Chambers, 74 Hutcheson Street, Glasgow.

**GUERNSEY.**—Sept. 15.—For Erection of a Terrace of eight Houses, for the Real Property Trust. Mr. J. C. Torodé, Secretary, Guernsey.

**HEREFORD.**—Sept. 12.—For Building a Block of Ten Houses at Barr's Court Brickyard. Mr. Willett, Architect, Hereford.

**HEREFORD.**—Sept. 12.—For Building Two Houses, Ryelands Estate. Mr. Willett, Architect, Hereford.

**HERTFORD.**—Sept. 10.—For Additions and Repairs to All Saints' Infant School. Mr. R. T. Andrews, Priory, Hertford.

**HULL.**—Sept. 19.—For Construction of Passenger Station at Southcoates. Mr. Wm. Bell, Architect, York.

**KENDAL.**—Sept. 19.—For Rebuilding Park. Mr. Stephen Shaw, Architect, Kendal.



KIDDERMINSTER.—Sept. 18.—For Building Post Office. H. M. Office of Works, Whitehall.

LLANDILO GRABAN.—Sept. 14.—For Rebuilding Moriah Baptist Chapel according to plans by Mr. George Morgan, 24 King Street, Carmarthen. Rev. D. Powell, Painscastle.

LONG BUCKBY.—For Building Four Cottages. Mr. Thomas Newitt, Long Buckby.

MIDDLESBROUGH.—Sept. 8.—For Construction of Hury Reservoir. Mr. Mansergh, 3 Westminster Chambers, Victoria Street, S.W.

MONKWEARMOUTH.—Sept. 19.—For Building Stables for 107 Horses, with Loose Boxes, Shoeing-shed, Harness-Room, &c., and Two Horse-keepers' Houses. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

MORLEY.—Sept. 13.—For Building Cemetery Chapel, Lodge, Entrance Gates, and Boundary Walls. Mr. J. Sykes, Architect, Queen Street, Morley.

NEWCASTLE-ON-TYNE BARRACKS.—Sept. 10.—For Building Provost Establishment and Works in connection. Royal Engineer Office, 13 Bell Grove Terrace, Newcastle-on-Tyne.

NEWHAVEN, SUSSEX.—Sept. 17.—For Erection of two Chapels, Keeper's Lodge, Mortuary Enclosing Walls, Construction of Roads, and Completion of Cemetery. Mr. Alfred R. O. Lowndes, Clerk to the Board.

NORTHUMBERLAND.—Sept. 15.—For Building Cottages and other Works on the Callaly Estate. Mr. R. J. Johnson, Architect, 3 Arcade, Newcastle-on-Tyne.

NORTHWICH.—Sept. 20.—For Construction of Works of Water Supply for the Township of Acton. Mr. H. J. Bennett, Surveyor, Northwich.

ORMSKIRK.—Sept. 19.—For Additions and Alterations at the Workhouse. Mr. Thomas Kissack, Architect, Derby Street, Ormskirk.

PADDINGTON.—For Building Stabling for 140 Horses, with other Buildings. Mr. Gundry, Architect, 13 John Street, Adelphi, W.C.

REDCAR.—Sept. 8.—For Building Cottage on Esplanade. Mr. R. Pullen, 143 High Street, Redcar.

SHEFFIELD.—Sept. 8.—For Building Chancel, &c., to Christ Church, Gleadless. Mr. John D. Webster, Architect, 21 Church Street, Sheffield.

SHEFFIELD.—Sept. 19.—For Building Shops, Offices, &c., in West Street. Messrs. Wightman & Wightman, Architects, High Street, Sheffield.

SHEFFIELD.—Sept. 29.—For Construction of Arches, Culverts, Retaining Walls, and Works for Road, Crooke's Moor Valley. Mr. R. Davidson, Borough Surveyor, Sheffield.

STANNINGLEY.—Sept. 11.—For Building Fitting Shop. Mr. Jowett Kendall, Architect, Idle.

STAPLESTOWN.—Sept. 10.—For Building Chancel to Church. Mr. J. F. Fuller, Architect, 179 Great Brunswick Street, Dublin.

SOWERBY BRIDGE.—Sept. 10.—For Building Detached House. Messrs. Utley & Gray, Architects, 10 Waterhouse Street, Halifax.

SWANSEA.—Sept. 10.—For Formation of Tunnel under Oystermouth Road, Laying Pipes, &c., for the Baths and Laundry Company. Mr. Bucknall, Architect, Worcester Place, Swansea.

TORQUAY.—Sept. 29.—For Erection of Mansion, Stables, and Cottage at Shipway. Mr. E. H. Harbottle, Architect, Exeter.

WANDSWORTH.—Sept. 13.—For Building Nurses' Day-room, &c., at the Infirmary. Mr. T. W. Aldwinckle, Architect, 2 East India Avenue, Leadenhall Street, E.C.

WASHINGTON.—Sept. 19.—For Building Eleven Dwelling-houses. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

WEOBLY.—Sept. 8.—For Works at House and Farm Buildings. Messrs. Ashdown & Son, Architects, Talbot Chambers, Shrewsbury.

WEST BROMWICH.—Sept. 20.—For Erection of Laundry Buildings at the Workhouse. Mr. W. Henman, Architect, 38 Bennett's Hill, Birmingham.

YEADON.—Sept. 15.—For Building Residence. Mr. George Foggitt, Architect, Yeadon.

## TENDERS.

### ABERDEEN.

For Supplying and Erecting Two Gasholders and Constructing Gasholder Tanks, Aberdeen. Mr. ALEXANDER SMITH, Engineer.

#### Holders.

Highest Tender . . . £14,700 0 0  
Hanna, Donald & Wilson, Paisley . . . 11,500 0 0

#### Tanks.

Highest Tender . . . 15,868 0 0  
Pringle & Hessor, Aberdeen . . . 10,688 0 0

There were 7 offers for the Holders and 7 for the Tanks.

### ABERAVON.

For Additions and new Shop Front, for Mr. East, Aberavon. Mr. H. FRANCIS CLARKE, Architect, Briton Ferry.  
Thomas & Cox, Neath . . . £485 0 0  
Davies, Aberavon . . . 430 0 0  
JENKIN & REES, Aberavon (accepted) . . . 357 0 0

### BELFAST.

For Building Goods Shed on Donegall Quay, Belfast. H. & J. MARTIN, Belfast (accepted) . . . £9,719 0 0

### BELPER.

For 1,000 Yards of Sewers, with Manholes, &c., in the Village of Duffield, for the Belper Union. Mr. R. ARGLE, Engineer, Market Place, Derby.  
Helton, Birmingham . . . £641 0 0  
Walker, Wirksworth . . . 390 0 0  
Roberts, Oakenshaw . . . 389 19 6  
Biggs, Hansworth . . . 380 0 0  
Waterfield, Wirksworth . . . 348 10 0  
Tomlinson, Derby . . . 322 0 0  
Coupe, Ripley . . . 311 0 0  
Dovener, Sowerby Bridge . . . 308 11 0  
Wain, Ripley . . . 305 8 2  
HINGLEY, Duffield (accepted) . . . 290 0 0

### BEWCASTLE.

For Building New Bridge at Clattering Ford, Bewcastle. Mr. J. A. CORY, Architect, Carlisle.  
Little, Carlisle . . . £1,027 13 0  
Ormiston, Wetheral . . . 795 0 4  
Wilson, Gilsland . . . 689 9 10  
Routledge, Brampton . . . 677 8 2  
Bell . . . 670 11 6  
Graham, Longtown . . . 608 2 6  
Sproat Brothers, Talkin . . . 498 4 0

### BLACKPOOL.

For Additions to Victoria Hotel, South Beach, Blackpool. Mr. THOS. P. WORTHINGTON, Architect, Blackpool.  
Brathwaite, woodwork . . . £560 0 0  
Walsley & Sons, plumber, glazier, painter, and gasfitter . . . 185 0 0  
Nickson, mason and flagger . . . 111 0 0  
Dewhurst, plasterer . . . 98 15 0  
Seed, slater . . . 39 10 0

### BRIGHTON.

For new Front, 69 King's Road, Brighton. Mr. ARTHUR LOADER, Architect, Brighton.  
Parsons . . . £116 0 0  
Lockyer . . . 106 0 0  
BARNES (accepted) . . . 104 0 0

### BRITON FERRY.

For Additions and Alterations to Wesleyan Chapel, Briton Ferry. Mr. H. FRANCIS CLARKE, Architect, Briton Ferry. Quantities by the Architect.  
Jenkin & Rees, Aberavon . . . £445 10 0  
John, Briton Ferry . . . 378 10 0  
GEORGE, Briton Ferry (accepted) . . . 369 0 0

### COCKERMOUTH.

For Drainage Work at Gilcrux. Ure . . . £24 15 0  
JOHNSON (accepted) . . . 17 10 0  
Fisher & Kirk . . . 21 0 0

### DURHAM.

For the Construction of Drains at Tudhoe Grange. Snaith, Tudhoe Grange . . . £46 7 6  
CARRICK, Durham (accepted) . . . 45 16 0

### GIPSY HILL.

For Decoration at Cotsmandene, Gipsy Hill. Mr. EDWIN T. HALL, A.R.I.B.A., Architect, 57 Moorgate Street, E.C.  
Flemming . . . £245 0 0  
Dobey . . . 311 0 0  
POOLE (accepted) . . . 299 0 0

### GLASGOW.

For Repairs to the East Wharf, Port Glasgow. LYLE (accepted) . . . £500 0 0

For Building Free Church at Leadhills. Mr. J. B. WILSON, Architect, Glasgow.

#### Accepted Tenders.

Aikenhead & Sons, High Blantyre, mason (stones supplied on site) . . . £748 15 3  
Burns & Co., Larkhall, wright . . . 430 0 0  
Ross & Sons, Glasgow, slater . . . 116 17 5  
McOuat, Coatbridge, plasterer . . . 69 4 5  
Proctor & Weir, Biggar, plumber . . . 43 6 3  
Bennett & Sons, Glasgow, painter . . . 42 0 0  
Miller, Glasgow, glazier . . . 35 0 8

### HADLEY.

For Roads, Drains, &c., at Beech Hill Park, Hadley, for Mr. Charles Jack. Mr. EDWIN T. HALL, A.R.I.B.A., Architect and Surveyor to the Estate, 57 Moorgate Street, London, E.C.  
Marriott Bros. . . £6,439 0 0  
Dunmore . . . 6,060 0 0  
Wilson . . . 5,996 0 0  
Pizzey . . . 5,860 0 0  
Harris . . . 5,320 0 0  
LLOYD (accepted) . . . 4,798 0 0  
For House at Beech Hill Park, Hadley. Mr. EDWIN T. HALL, A.R.I.B.A., Architect, 57 Moorgate Street, London.  
MARRIOTT BROS. (accepted) . . . £2,800 0 0

### GLOSSOP.

For Erection of Brookfield Congregational Church, Glossop. Mr. J. H. BURTON, Architect, Warrington Street, Ashton-under-Lyne.  
Cordingley & Stopford, Manchester . . . £2,703 0 0  
Robinson, Hyde . . . 2,493 0 0  
Smith, Fairfield . . . 2,400 0 0  
Haughton, Godley . . . 2,310 0 0  
Burton & Sons, Ashton-under-Lyne . . . 2,195 0 0  
Holmes & Webster, Ashton-under-Lyne . . . 2,159 0 0  
Castle Hall Saw Mills Company, Stalybridge . . . 2,100 0 0  
DAVISON, Manchester (accepted) . . . 2,000 0 0

### HAMILTON.

For Established Church at Quarter, near Hamilton, N.B. Mr. J. B. WILSON, Architect, Glasgow.

#### Accepted Tenders.

Downie, Hamilton, mason . . . £685 0 0  
Burns & Co., Larkhall, wright . . . 499 0 0  
J. Bertram, Strathaner, slater . . . 129 18 0  
J. Bertram, Strathaner, plasterer . . . 72 0 0  
Phillips & Bruce, Glasgow, plumbers . . . 50 0 0  
Miller, Glasgow, glazier . . . 47 19 0  
J. & S. Kemp, Hamilton, painters . . . 47 2 8

### HINCKLEY.

For Sewage Outfall Works and Supplemental Town Drainage, Hinckley. Highest tender . . . £9,609 0 0  
S. & W. PATTINSON (accepted) . . . 6,423 0 0  
Eighteen tenders were received for the work.

### LEYTON.

For the Erection of a Pair of Cottages in High Street, Leyton, for Mr. S. C. Bosanquet. Mr. RICH. CREED, F.R.I.B.A., Architect.  
Arber . . . £593 0 0  
SAYER (accepted) . . . 590 0 0

### LONDON.

For Alterations and Repairs to Chapel, Collier's Rents, Long Lane, Bermondsey, for the London Congregational Church Extension Union. Mr. W. D. CHURCH, Architect, 12 South Place, Finsbury, E.C. Quantities not supplied.  
Woodward . . . £685 0 0  
Thison . . . 495 0 0  
STEEL BROS. (accepted) . . . 493 0 0

For Additions to Oaklands, Honor Oak, S.E. Mr. W. H. JERVIS, Architect.  
REDMAN, Brockley (accepted).

For Alterations and Additions to No. 15A Connaught Square, Hyde Park, W., for Mr. Edward Bannister. Mr. T. S. ARCHER, M.R.I.B.A., Architect.  
Nuthall . . . £215 0 0  
White . . . 191 10 0  
Haines . . . 158 5 0

For the Erection of Shops, &c., Albany Road, Camberwell. Mr. R. CRUWYS, Architect, Bank Chambers, 451 Brixton Road, S.W.

Downs . . . £2,977 0 0  
Rice . . . 2,717 0 0  
Candler . . . 2,600 0 0  
Holloway . . . 2,387 0 0  
Tyerman . . . 2,310 0 0  
Taylor . . . 2,270 0 0  
Burch & Moor . . . 1,871 0 0  
Johnson . . . 1,650 0 0

For Alterations and Additions to a House in Acre Lane, Brixton. Mr. R. CRUWYS, Architect, Bank Chambers, 451 Brixton Road, S.W.

Taylor . . . £1,175 0 0  
Candler . . . 1,150 0 0  
Rice . . . 1,069 0 0

For Alterations and Additions at Astley's Theatre, Westminster Bridge Road, S.W., for Messrs. G. & G. Sanger. Mr. FRANK MATCHAM, Architect, Rugby Chambers, Bedford Row, W.C. Quantities by Mr. Frederick Thomson.

	If the Promenades are covered with 7-lb. lead.	If the Promenades are covered with 7 lbs. lead.
Dove Bros. . . . .	£3,855 0 0	£3,800 0 0
Wall Bros. . . . .	3,765 0 0	3,750 0 0
McCormick & Sons . . .	3,753 0 0	3,723 0 0
Toms . . . . .	3,564 0 0	3,539 0 0
Patman & Fotheringham .	3,289 0 0	3,400 0 0
Shurmur . . . . .	2,853 0 0	2,988 0 0

For the Completion of the Premises Nos. 175 and 176 New Bond Street, for the Executors of Mr. Peter Robinson. Messrs. ALLEN & MACKLAND, Architects, 14 Argyll Street.

McLachlan & Sons . . . £1,197 0 0  
Saunders . . . 982 0 0  
Colley . . . 888 0 0  
Colwill . . . 850 0 0  
Clarke & Mannoch . . . 810 0 0  
Sharpe . . . 667 0 0

For Rebuilding No. 7 Old Burlington Street, W., for Mr. Edward Green. Mr. J. T. WIMPERIS, Architect.

Lang & Son . . . £2,997 0 0  
Brass . . . 2,976 0 0  
Boyce . . . 2,973 0 0  
Hatfield & Son . . . 2,950 0 0  
Bywaters . . . 2,850 0 0  
H. & E. Lea . . . 2,829 0 0  
Fish, Prestige & Co. . . 2,793 0 0  
Scrivenor . . . 2,678 0 0

For Rebuilding Nos. 24 and 25 King Street, Westminster, for Mr. G. Kelly. Mr. F. W. WATTS, Architect.

Stimpson & Co. . . £2,766 0 0  
Lovatt . . . 2,700 0 0  
Scrivenor & Co. . . 2,490 0 0  
Fish, Prestige & Co. . . 2,488 0 0  
Royce . . . 2,480 0 0



LONDON—continued.

For Taking Down and Rebuilding No. 137 Oxford Street, W. MR. RICH. CREED, F.R.I.B.A., Architect.		
Mortar . . . . .	£1,883	0 0
Bangs & Co. . . . .	1,860	0 0
Wall Bros. . . . .	1,819	0 0
Patman & Fotheringham . . . . .	1,773	0 0
Nightingale . . . . .	1,669	0 0
Clark & Bracey . . . . .	1,620	0 0
Langmead & Way . . . . .	1,595	0 0
Lawrance & Sons . . . . .	1,579	0 0

TOCKHOLES.

For Draining at Ellenshaw Terrace and Royal Farm, Tockholes. MR. JAMES BERTWISTLE, Architect. Quantities by the Architect.		
Pursell, Clitheroe . . . . .	£642	12 0
Counsell, Blackburn . . . . .	395	0 0
Arkwright, Darwen . . . . .	369	12 6
Harris & Jenkins, Great Harwood . . . . .	361	12 0
Dean, Accrington . . . . .	360	0 0
Irvell & Sons, Darwen . . . . .	315	0 0
Carr, Blackburn . . . . .	314	14 8
Lawrence, Darwen . . . . .	310	9 0
Taylor, Rawtenstall . . . . .	305	5 0
Leigh, Darwen . . . . .	305	0 0
KNOWLES, Darwen (accepted) . . . . .	303	17 0

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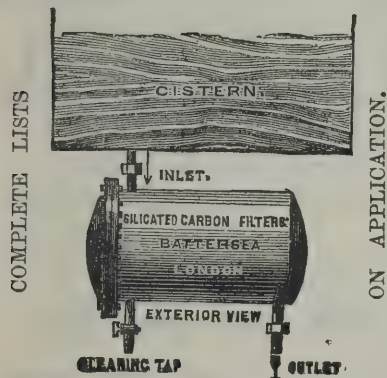
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# The Architect.

## VERY TALL BUILDING.



NE of the earliest efforts in bricks and mortar was an edifice, as we are told, intended to place its builders on a level with the authorities of the upper air, with whom they found themselves not able to cope at the level of the ground. It was a failure; and those who in after times desired to rise superior to ordinary earthly conditions were contented themselves

with ascending to the "high places" which mountain tops had provided for them by natural means. But throughout all ages it has been a chronic ambition in the human mind, quite apart from any wish to invade the dominions of superterranean powers, to build something very tall. There are legends in many lands of Somebody's "Folly," the ruins of which remain as a warning to posterity to count the cost beforehand in more ways than one. Perhaps the most piquant of such traditions among ourselves is that of BECKFORD'S tower at Fonthill, and its sudden disappearance (he had been his own architect), as complete in its way as that of the campanile mentioned by ALBERTI, the total subsidence of which into Venetian soil provoked him to lay down the cautious rule always to dig your well before you lay your foundation. In still more modern times we have, amongst the rest, Mr. HANKEY'S edifice by St. James's Park, of which we will say nothing but that it is of the same class of enterprise—no doubt inspired from the same source—as the very tall buildings we have now to speak of.

The city of New York, as all the world knows, stands on a long narrow promontory (or island) between two sea-reaches, and in fact occupies now the whole of it where half a century ago it covered only the seaward end or point. This point, as might be supposed, like the corresponding portion of London which we call "the City," still continues to be the central seat of commercial business; and, as is fortunately not the case in London, it is on account of its configuration incapable of extension by the process of expanding into surrounding neighbourhoods. In other words, the commercial quarter can only expand in one direction; and it may at once be said that this disadvantage has for some time past exercised the local mind very seriously.

Now in London we have adopted two modes of dealing with the "City"—or rather three, if we include the direct enlargement of the radius. In the first place, we have been covering every available foot of ground formerly open, and secondly, we have been increasing the height of our buildings. Speaking roundly, the ramshackle loose-jointed old "City," of seldom more than two storeys high, has given place to a well-shaken-together new "City," averaging four storeys together with a basement which is as good as another. Few people, we believe, are at all aware of the enormous augmentation of business "floor-space" which has been accomplished within the limits of acre by acre in this way; and we need scarcely add that all the while the value of yard by yard of the floor-space itself has been equally augmenting, so that the advance in the total rental value of the "City" during the last thirty years has come to be one of the wonders—although there are several more of the same sort—of modern civilisation.

What, then, could be done with New York? What has been done, in the ordinary way, is of course the same gradual consolidation of the building property and the same increase of the height of houses; but that these processes have not met the advancing requirements of the commercial community will not surprise anybody who has even a very moderate acquaintance with American affairs. In a word, the New York building owners have considered themselves forced into an increase of altitude which not only is astonishing, and to many of our readers may seem almost incredible, but is becoming alarming.

The plan adopted is to obtain a suitable site and build upon it, for division into suites of offices, an edifice gigantic in all three dimensions; for what will some of our RIF VAN WINKLES of humdrum speculation-building in England say to

such a structure about 100 feet square and 150 feet high, divided into 300 suites of rooms distributed in ten storeys, and having for ascent and descent two or three pairs of "elevators" or lifts performing regular journeys up and down every few minutes?

As matter of fact, buildings of this remarkable kind have been erected in New York during the last eight or nine years, not in one or two cases only, but in such a number and with such satisfaction to owners and occupiers that some of the more thoughtful classes of the citizens are becoming apprehensive lest the spirit of enterprise should go a little too far in such an extraordinary direction. The first of these buildings was erected by the proprietors of the well-known *Tribune* journal in 1874; and it started the race with no half measures. The height was at once made 155 feet to the roof, the number of storeys above ground ten, and the thickness of the walls at the base over 5 feet. The cost, we may add, was nearly a million of dollars, besides another half a million for the site. There quickly followed a similar building for one of the Telegraph Companies, and one for the *Evening Post* newspaper; then "Temple Court" for law offices; then the "Morse Building," the "Mills Building" by the Stock Exchange, the "United Bank Building," and so on; to be followed so far as appearances now go, by many more, until whole rows of these enormous houses 150 feet high—so the timid say—shall before long convert the streets into narrow gorges, as inaccessible to the light and air of heaven as they must be concentrative of the increasing noise and dirt of incessant money-spinning.

This strange phenomenon of building, however, is not to be regarded as an eccentricity. It is quite plain that it is the deliberate outcome of urgent necessity and legitimate enterprise. The elevator and the telephone have done it all. When the crowding of business has reached a climax on the ground, the elevator offers without a moment's hesitation to take it up into the air, and the telephone is as ready to lend its aid in bridging over space at the higher level as at the lower. If stairs had to be ascended to tenth floors, and conversation had to be conducted face to face, the case would be different. But it occurs to us to ask, first, why the increase of height should stop at 150 feet; and, secondly, why the telephone by itself should not solve the problem in a way of its own, by carrying word of mouth simply over a larger area of the town? There is obviously no need to confine heights to the present limit, either because of the narrow resources of construction or on account of the feeble powers of the lift. At the same time, with all its boasted efficiency, it must be admitted that the telephone cannot submit a sample of goods, or sign a contract, or evade a quarrel by the charm of a smile, or shake hands and join in a slight refection over the settlement of a difficulty.

But we cannot help expressing a hope that this too tall style of building may not take root in London. One would not like to see the Royal Exchange with six extra storeys added, or two rows of "monster" houses 150 feet high running along the Poultry. Amongst Londoners there are so many who object to telephones and lifts on personal grounds, and even to the increase of the pace of business for similar reasons, that the present generation at any rate may perhaps so far feel secure against the imitation of New York. But nevertheless, if commercial activity at headquarters is to go on as it has been going, it would be hazardous indeed to prognosticate what may happen in another twenty years.

The economical question with the owners of house property in the City of London and other similar centres of business is at present easily stated. Take a good house of business offices at its present extreme height of four storeys above ground, what is the value of the roof area by way of a ground rent? According to existing arrangements it is worth nothing. That is to say the rent to be obtained for a fifth storey would be so small, and so precarious besides, that it would not pay for the extra cost of building. But if any one were to think of taking up the strict line of American speculation, the case would stand somewhat differently. He would require to start with a sufficiently large area of ground. The cost of lifts and the space they would occupy might be easily dealt with, even if a staircase were also formed as a concession to prejudice (there are no prejudices in America). But the additional substantiality of walls, and the loss of space thereby arising, might be a more serious item. The ground rent value at the high level would of course be estimated after consider-



ing all this ; and it would still depend upon how far (to speak plainly) men of business would consent as a rule to commit themselves to the lift ; for they certainly would not ascend the stair. For the present we are of opinion that an exhaustive calculation of value would not bring out a profit, and if not, it plainly follows that the ground rent value is nil. If, on the contrary, a profit were found to appear, as estimated for one extra storey only, it may perhaps be said—conceding the use of the lift as an essential condition—that the greater the number of extra storeys the greater the profit would be. If so, this is the explanation why the Americans commenced *per saltum* with ten storey buildings ; once we enter the lift it makes little difference where we get out of it. But there are other considerations, more peculiar to London, which we cannot at present proceed to discuss.

## THE BRUSSELS ARCHITECTURAL EXHIBITION.—II.

CORRESPONDING with the revival of the Elizabethan and Queen Anne styles in England, there has been in Belgium quite a “Renaissance” of the Flemish style of the sixteenth century. Some architects, however, object that, whereas the Tudor style has been improved to suit modern ideas of comfort, the old Flemish buildings are reproduced with but slight modification, with their old nailed doors and vastitas (Germ. *Was ist das?*), and windows with small and partially opaque panes that do not afford sufficient light. However that may be, there are some very effective drawings of neo-Flemish edifices in the exhibition. We have said that the modern section is subdivided into thirteen classes, while the designs sent in for competition form the fourteenth.

The first class is devoted to ecclesiastical architecture, and is opened by the president of the Société Centrale d'Architecture, M. J. BAES, with a *relevé*, that is to say, a drawing from the existing structure, of the Temple des Augustins, Brussels, with design for a presbytery. This is followed by the drawings of three new churches, designed by M. BACKELMANS, a Prix de Rome\* of great promise, who died very young. That dedicated to St. ARMAND AU STUYVENBERG, at Antwerp, is in the Transition style of the thirteenth century, with French treatment, a style which is much in fashion in Belgium at the present time. The chief peculiarity of this church is that the arrangement of the columns permits of all the chapels being seen from any point in the nave. M. L. BLOMME, architect to the province of Antwerp, contributes his drawings of the church at Berlaer in thirteenth-century Gothic, with a treatment which is rather English than French. M. E. CARPENTIER, whose studies in England give a decided *cachet* to his compositions, comes next, with the drawings of two churches already erected, and both the preliminary and the definite design for the reconstruction of Spa parish church, a very fine work now in course of execution. A photograph is also shown of the church of Nôtre Dame, at Huy, as it existed a short time ago, and the same view of the church as now in course of restoration, in the Perpendicular style of the thirteenth century, with almost German treatment. A design for the completion of the royal church at Laeken, near Brussels, by M. L. DE CURTE is interesting. The drawings of the Jewish synagogue in the style of the twelfth century, erected in the Rue de la Régence, Brussels, are exhibited by the architect, M. DE KEYSER. Quite a moonlight effect is produced by the blue Mons stone in the design, by M. V. DUMORTIER, for the restoration of the collegiate church of Sainte-Waudru, at Mons, the chief town of Hainault. The diagram plan is treated most artistically, being placed in one corner with no border line round it—nothing but the black lines with the sky as a ground tint. Another design for the restoration of the same church in the florid Gothic style of the fifteenth century is, however, more interesting. M. CHARLES LICOT, who took the gold medal at the Brussels triennial exhibition of last year, contributes a series of carefully elaborated drawings of the ruined Abbaye de Villers, erected at the beginning of the thirteenth century in the Transition style from Norman to Early Gothic, with design for its appropriate restoration. M. F. SCHOY has sent very effective copies on tracing cloth of drawings of the

church of Nôtre Dame du Sablon, Brussels, with design for its restoration, which gained a gold medal at the present Amsterdam Exhibition. This historical church, which adjoins the Rue de la Régence, is in a deplorable state of dilapidation ; and a sacristy of comparatively modern addition projects beyond the new line of frontage, so as to obstruct the view of the new Palais de Justice from the Place Royale. The church is to be restored, and the sacristy removed as soon as means permit.

The second class embraces civil architecture, with a very wide range of subjects. A striking design is that of the monumental bridge, by M. J. BAES, president of the society, which gained the prize of the Belgian Academy in 1870, and the gold medal at the Brussels Salon in 1878. M. DE LA CENSERIE (Prix de Rome) has sent a design for the restoration of the guard-house at Bruges. This building contains the celebrated chimney-piece of the Franc de Bruges, one of the finest bits of sixteenth-century sculpture in the whole of Belgium. M. COENRAETS and M. DE VESTEL both send designs for the monumental mouth of a tunnel under the Alps ; if the former possesses the greater merit, the latter is the more imposing of the two. Very interesting, now that the edifice is fast approaching completion, are the drawings of the colossal Palace of Justice, Brussels, designed by M. J. POELLAERT, who died in 1879. The public are now excluded from the works, as the building is to be inaugurated on October 15 next, and great activity prevails. Plans and photographs of the beautiful Antwerp Bourse, in the development of the fifteenth-century style peculiar to that city, and with each column of different design, are shown by its architect, M. J. SCHADDE, together with drawings of the Bruges station—finished this year, and against which the reproach has been cast that it is more like a convent than a railway station. In the decoration of the interior, the various modes of travelling are depicted—the sledge, the sedan-chair, the ox-cart, and the diligence—as contrasting with the steamboat and the locomotive. In 1881 the communal administration of Schaerbeck, a suburb of Brussels, opened a competition for a *maison communal*—which answers to *hôtel de ville* in a city—and three of the designs submitted are exhibited. That by M. VAN RYSELBERGHE, brother of the scientist at the Observatory, whose inventions in telegraphy and telephony are now exciting so much interest, is in the Norman Gothic of the thirteenth century, treated in English fashion, and is finely drawn. That by M. DUMORTIER, a member of the council, is bold and striking ; while that by M. BISSCHOPS is effectively drawn in black and white. A design by M. L. JACQUES, of a *maison communale* for a town of 50,000 inhabitants, is in the Flemish style of the sixteenth century ; and these two last-named compositions give a good idea of the style now in vogue in Belgium.

In the third class, scholastic architecture, the Municipality of Antwerp (M. P. DENS, architect) have sent drawings of all their schools, from the free communal school to the Athenæum ; and this series forms a very complete collection of such erections. M. J. J. BENOIT, who is superintending the erection of the new Palais de Justice, under the Inspector-General of Ponts et Chaussées, M. WELLENS, contributes his design, now executed, of the drawing school and girls' middle-class school at Molenbeek Saint-Jean, boldly treated in the neo-Greek style. In this class are exhibited the drawings, by the late J. P. CLUYSENSAER, M.R.I.B.A.—a friend of DONALDSON and FERGUSON—of the Brussels Conservatoire de Musique, in the LOUIS XIII. style, which forms an effective addition to the Rue de la Régence. M. DE COSTER, of Antwerp, Prix de Rome, sends his design for a college of music and elocution for 500 pupils, which gained the prize at the architectural competition of 1875. M. DE LA CENSERIE, Bruges, and M. DIETENS, Antwerp, both Prix de Rome, send designs, one for an athênæum, and the other for a university. All the plans of the Normal College for infant school teachers at Mons, a building which is very complete and justly admired, are exhibited by the architect, M. J. HUBERT.

In the class (fourth) of hospital architecture, MM. L. & H. BLOMME, of Antwerp, show a decidedly English tendency in their design for an orphan girls' school ; while their orphan boys' school, erected at Antwerp in the Flemish style of the sixteenth century, is one of the finest erections of this kind. Each city of Belgium has preserved its individual style of architecture. That of Bruges is fifteenth-century Gothic with stepped gables and dormers, generally cut by three or four arcades rising the whole height of the building, and connected

\* Every three years the Belgian Government offers a prize of 5,000 frs. (200*l.*) a year for four years, to enable the successful candidate to study in Greece and Italy.



by a moulding which forms a general frame to the façade. This individuality is well carried out by M. L. DE LA CENSERIE in his design for a hospital, entirely of brick, in the style of the fourteenth and fifteenth centuries, the same that he adopted for the Normal School which he erected at Bruges. An interesting exhibit is the collection of drawings made from the Biloque Hospital, Ghent (thirteenth century), by M. E. SERRURE, of St. Nicholas, in the Pays de Waes, a district of East Flanders.

Three exhibits merit special attention in class five, domestic town architecture. M. E. ACKER, a member of the council, sends drawings of the frontage of two houses, one at Bucharest, with decoration in graphite, a new process, giving the appearance of enamel and producing an ornamentation which resists the action of the weather. M. L. H. BLOMME contributes his remarkable drawings of the *Meijbloem Huis*, erected on the Place de Meir, Antwerp, in the Flemish style of the sixteenth century; and M. A. SAMYN puts in his design for the masonic lodge now erected in Brussels, a fine composition in the Egyptian style, with handsome decoration.

In class six, domestic suburban architecture, M. J. RAU exhibits his design for a country-house, which gained the first prize at a competition opened by the Central Society in 1881. M. J. SCHADDE, professor of architecture at the Royal Academy of Antwerp, and who has erected more Flemish châteaux than any other architect in Belgium, shows photographs of a fine building of the kind erected for Baron G. DE CONINCK, at Woumen, in West Flanders. M. VAN YSENDYCK puts in the plans, façades, and details of various constructions in neo-Flemish or the revived sixteenth-century Flemish style; and M. P. SAINTENOY, Brussels, some sketches of country-houses.

Under the head of class seven (industrial architecture) must be mentioned the design for a Cité Ouvrière, or workmen's colony, by M. H. CLOSSON, with an application of warming by steam, as well as a scheme for the warming of a block of dwelling-houses from a common source of heat.

In class eight (military architecture) the Minister of War sends drawings of the Antwerp Arsenal and various barracks designed by the late M. PAUWELS. The Porte d'Hérentals in the new Antwerp fortifications, designed by the same architect, is bold, but looks better as executed than it does on paper. In this class also appear the fine cavalry barracks, erected to face the new Champ des Manœuvres, near Brussels.

Class nine is devoted to funereal or commemorative architecture, and includes the monument in the Laeken cemetery to the late M. J. POELAERT, architect of the new Palais de Justice, by M. J. J. BENOIT. It is in the neo-Greek style, the same as that of the Palais de Justice, and contains a bust of the architect. M. H. BLOMME sends a project for a Campo Santo, treated in the severe style of the thirteenth century. M. P. SAINTENOY puts in his design for a commemorative monument that gained the first prize at the Ghent Exhibition of industrial art last year, and M. A. SCHOY his sketch of the monument to FLAMINIUS GARNIER (sixteenth-century Flemish) in the church of Notre Dame du Sablon, Brussels.

In class ten, of decorative architecture, M. J. BAES, the president of the society, enters his design for the decoration of the Assize Court of the new Palais de Justice, which has been carried out, and produces a grand effect. Some designs of cars for the Mechlin Cavalcade in 1875 by M. W. GEETS, director of the Mechlin Academy, are very fine; as also is that by M. A. F. SCHOY for the triumphal arch erected at the Porte de Schaerbeek, Brussels, during the fêtes of 1880. Careful drawing is evinced in the design for an archæologist's library, by M. P. SAINTENOY, that gained the first prize at the Ghent competition in 1882.

Class eleven is entitled "Travaux d'Édilité," and includes public places with the transformation of streets or quarters. Such a transformation of the streets between the upper and the lower towns of Brussels has been talked of any time during the memory of the oldest inhabitant, and probably long before. Many have been the plans proposed, and one more is added in the perspective view contributed by M. G. BORDIAU, architect of the Brussels National Exhibition of 1880. The drawings by the late J. P. CLUYSENAER, of the Passage St. Hubert, Brussels, built in 1846, are exhibited. This was then the largest and most splendid arcade in Europe, measuring 213 mètres long, 18 mètres high, and 8 mètres wide (699 feet by 59 feet by 26 feet), until the Victor Emanuel Gallery was erected at Milan after the same design.

Class twelve consists of drawings and restorations of foreign

monumental buildings, by Belgian architects, and includes a fine drawing of the Parthenon at Athens, both in its present state and with design for restoration, by M. DE LA CENSERIE, communal architect at Bruges. M. G. DEMAN contributes some well-executed fragments both from Rome and Pompeii.

Class thirteen contains sketches which cannot be included in the other classes. The most noticeable are water-colours by M. J. BAES, representing the quaint towers of several edifices in Holland, and a section in perspective of the Salle des Pas Perdus in the new Palais de Justice, with proposed decoration.

The conditions for the competition require that the designs be sent in anonymously, but be distinguished by a symbol or motto; and only the names of successful competitors will be known. The prizes offered are to the value of 1,000, 500, and 200 frs.; and an additional prize of 100 frs. may be added for merit of drawing, irrespective of architectural value. The style of the subject—"A High School of Architecture"—is left to competitors; but there must be ground-floor and first-floor plans, front and side elevations, a vertical section and details of exterior and interior. A perspective view or a short description may also be added. Although the subject is a school, it must have an artistic character befitting its destination. The school, intended to complete the art education of pupils who have already received elementary instruction in architecture, is to include: (1) four class-rooms for instruction in Classical and Mediæval architecture; (2) a class-room for mathematics, physics, and chemistry; a laboratory for the chemical professor; and another for thirty pupils, with special ventilation; (3) a class-room for lectures on construction, architecture, &c.; (4) two rooms for drawing from plaster casts and from nature; (5) one or more shops for manual work, such as joinery, carpentry, smithing, and modelling, which may be placed in the basement; (6) a permanent exhibition of models illustrating methods of construction; (7) a hall for exhibiting the works of pupils; (8) a large hall for réunions; (9) an architectural museum; (10) a library; (11) the director's residence; and (12) sixty cabinets for competitions in connection with a large ante-chamber.

Nine sets of drawings have been sent in, of which it may be said that No. 3, "Indispensable," is treated in a bold manner; that No. 4, "Alea jacta est," is good both in composition and in drawing; that No. 5, "Spero," is a good design, though the drawing is not so effective as some others; and that of No. 19, "Anath," the plan is far more meritorious than the façade. The judges consist of the members of committee, viz., MM. ACKER, BAES, BRUNFAUT, DUMORTIER, and NEUTE, to whom are added M. F. HOMPUS, delegate of the Antwerp Society of Architects; M. CHARLES SOUBRE, architect, Liège; and M. CHARLES VAN RYSELBERGHE, architect to the Ghent Municipality. The jury did not consider any design sufficiently meritorious to obtain the first prize; but they granted a second prize "with distinction" to M. OSCAR FRANCOTTE, and another to M. HUBRECHT. Third prizes are awarded to M. TULPINCK and M. MORIAL, while M. DE NEFF, M. VAN PETEGHEM and M. VAN ROELEN are consoled with honourable mentions.

The moving spirit and organiser of the competition and exhibition is M. CHARLES NEUTE, the secretary to the society; and the exhibition will close on the 30th inst. Last week we spoke favourably of the Great Eastern Company's Harwich route for Antwerp and Brussels, and incidentally named the new steamer *Norwich*. We have since made a trip in her, and find she does not belie her reputation. The elegance and convenience of her internal fittings are only equalled by her sea-going qualities. On September 1 this vessel left Harwich at 10 p.m., her usual hour for starting, while the captains of the Calais, Ostend and Flushing steamers refused to put to sea, and she reached Antwerp at a quarter to 11, only three-quarters of an hour after her usual time. So severe was the hurricane in Brussels that it tore up by the roots some of the younger trees in the boulevards.

**The Plans** for the erection of the new church on the West Cliff at Whitby have obtained all the necessary consents, including that of Sir George Elliot, Bart., M.P., who has instructed his solicitors to proceed with the conveyance of the site, and has expressed a hope that the tenders may be got ready and the foundation-stone laid at an early date. Mr. Johnson, of Newcastle-on-Tyne, the architect, is to visit Whitby shortly and advise as to inviting tenders for the execution of the work.



## CIRCULAR NOTES FROM FRANCONIA.—III.

[BY A CORRESPONDENT.]

THE name of Switzerland seems applied, through some lack of fit local appellation, to any district that abounds in crag, wood, and torrent. Belgium has at least one *petite Suisse* near Dinant, on the Meuse; "Saxon Switzerland," about the windings of the Elbe, is the pride of Eastern Germany; Switzerland's of diminutive scale crop up everywhere to provoke with misapplied epithet the tourist, who associates the word with snowy peaks, avalanches and glaciers, COLERIDGE'S "Hymn to Mont Blanc," and the adventures of the Alpine Club. Let no one, therefore, who makes a *détour* into Franconian Switzerland lose his temper for want of warning if he find the scenery of that pleasant region fall short in scale and character of the impressive associations of its name. Crag, woods, and streams he will see in plenty, but for peaks and passes must seek elsewhere.

Nürnberg has been left behind, and we drive cheerily along through meadow and harvest field streaked with patches of hop, through picturesque villages where the quaint little children are out enacting unconscious *Dorfgeschichten*, and under the shade of wayside trees to Birschfeld. A stretch of lovely pine-wood brings us out into the open again, to find the horizon of the high tableland we traverse is rising fast. We dash through the central square of Erlangen, without stopping to look at the university lodged in the old palace of the Margraves of Baireuth, and are glad soon after to lose sight of the railroad which has accompanied us thus far, as we come across the passage of the Ludwigs canal which connects the Danube and the Main, using at either end the waters of the Altmühl and the Regnitz. Wooded hills, red-tiled villages, and a glowing purple distance lie off the highway, which we leave beyond Bauersdorf, and turn aside by a sort of farm-road through the open fields and woods into the hills, along whose slopes the route will lead above the romantic and well-watered valleys to Muggendorf. This portion of the way is full of charm. Along the roads the unguarded fruit-trees hang out their clusters of cherries and apples; the cultivated land, without division, mingles corn, bearded barley, clover, vegetable crops and pasture in friendly neighbourhood; wains drawn by oxen, laden with the late hay harvest and the ripe corn, crawl slowly along; women are out at field work, their bright orange and scarlet kerchiefs, red bodices, and short dark blue gowns over the thick hosen making spots of brilliant colour. Here and there a village takes sun and shadow on its red roofs, deep-pointed gables and projecting dormers above the timbered upper storey; a Schloss, or more often a little chapel, makes a landmark on the summit of a hill. Along the road, or standing in the midst of the fields, the frequent crucifix, generally carved and coloured wood, and many stone crosses, show that the Franconian peasant clings to the pious ways of his fathers spite of the reformed doctrine. In this region the cemeteries for the village are often quite away from the houses, and the dead lie in a little walled-off enclosure amidst the friendly corn-fields, where the living labour in sight of their resting-place. At Pretsfeld a halt is made, and you can discuss coffee worthy of the best hotel in Europe outside a cross-way *Gasthaus*, and watch the women draw water for the brown cows and oxen, and the little gooseherd drive her inquisitive flock up the street in the wake of the wains. Then away to Ebermannsfeld, where there is a dye works. The village is full of wheels and streams, which, somehow or other, are not stained with the crimson and purple dye of the wool that is hung and twisted in the open air, carried about in baskets, and generally seems to look out of every window and door in the place; otherwise neither fouled water nor grimy smoke betray the presence of this local industry in the midst of rural nature.

The valley deepens and curves, the foliage is varied through pines, Scotch firs, lime, large-leaved oak, scanty beech and splendid poplars feathered to the roots, standing dark and upright as cypresses. At the Streitberg the hillsides are precipitous, and the limestone crags break out through the rich greenery in fantastic forms; a cluster of wooden houses like a Swiss village stands under the cliff where two roads to Baireuth branch off; the other side of the valley, Neideck, shows a ruined tower on a jutting cliff, masked below with green. A curve of the way beside the rushing trout-stream Wiesent brings you to your halting-place for the night—Muggendorf—not dulcet in name, but a romantic place notwithstanding. The village, with its hotels or pensions—much resorted to

by Germans—is built about a little church, with a square yellow-washed tower and pretty bulbous spire, at a meeting of the hills, where the grey rock cuts in jagged ridges and jutting crags through barren heights of turf, and the woods shroud the lower flanks. The valley is green and luxuriant; the clear river rushes along turning many a wheel in passage, curving in and out but always swift and brimming. From this spot, as duly set forth in the guide-books, the tourist climbs the hills to see the curious fossil caverns and extraordinary freaks of geological formation which have made the locality famous. The road onwards towards Baireuth, which we chose as the most picturesque route, took us beside the stream and the meadows, delicious with lush grass and flowers beneath the dolomite rocks, which here, for the most part, play the most extraordinary tricks, and transform themselves into any and every shape but that of the ordinary boulder or cliff. Now and then, however, a fine piece of broad face or striking cleavage seems to rebuke the vagaries of its fellows. The colour is a fine warm grey weathered to a ruddy tinge. The names Rabeneck, Rabenstein, Riesenburg, and so forth, indicate the character of these strange rocks, which in the narrower and wilder parts of the valley seem fit haunts of the "ominous bird," or the abode of gnome and hobgoblin. The Märchen, which MORITZ VON SCHWIND, STEINLE in his younger days, KOCH, and so many German artists have delighted to illustrate, rush upon one's remembrance in these regions of fantastic beauty, which are all the more striking by contrast with the smiling fertility of the country which has preceded them.

A sharp curve to the right and round again, and a long drive through another and gentler valley, the sinuous windings of which, beside its flowing stream, seemed endless, brought us to Waischenfeld and the morning halt of our second day. Hence the road led up to more open land, the hills gradually receded and lay around in the distance, and a long and rather monotonous route up and down the gentle swells of high tableland, varied by tracts of wood, brought us at last to Eckersdorf and its pretty green dell, and the castle and woods of the Fantasie. A mile or two further the familiar face of the old court town of Baireuth looked up to greet us from the sort of basin in which it lies, the ungainly block of the WAGNER theatre showed on the hill to the left, and the fact became apparent that a considerable development of very ugly dwelling-houses has followed upon the kind of artificial resurrection of Baireuth under the great dramatic festivals of which it has been made the scene.

For a month or two in the year Baireuth "wakes up to find itself famous"; carriages pour in from the towns about and stand for hire in the usually silent broad main street; the principal hotels and the restaurant on the hill are crammed with visitors, and on the days of performance dine their guests by hundreds, the repast gaining a special flavour to the curious through the presence of dramatic celebrities from the great theatres of Germany, assembled in Baireuth as the cast for the WAGNER *Bühnenfestspiel*. At the last performance of "Parsifal" this year there was a rush of musicians and critics from London, whose season barely set them free in time, and many of whom travelled direct out and back again—a piece of professional or artistic enthusiasm implying no small endurance. It was universally agreed by those who know that the *ensemble* of the performance of "Parsifal" was this year the finest yet achieved. The double alternative cast was splendid in power; the chorus singers were trained soloists from Munich; the orchestra, under Herren SEIDL and LÉVY, played with astonishing fire and *finesse*; the machinery for the spectacle had been brought into thorough working order, and certainly accomplished a grandeur of illusion which might satisfy the most exigent lover of the united arts. The enormous depth and height of the stage facilitated the building up of the interior of the domed and galleried temple of the Graal, its vista of pillared aisles and gemmed and golden walls and arches of Moorish type, with a grandiose effect not possible elsewhere. The double procession of knights and choristers is literally seen in a perspective of solemn movement that is removed from even association with stage contrivance, and the management of growing or fading light athwart the rich architecture and impressive figures is for pictorial as well as emotional effect quite unique. This tableau, which occurs in the first and last acts, is far the best. Next in artistic management is the interior of the magician's castle, a sort of Saracenic tower half in ruins. The transformation scenes are cleverly managed,



and some of them beautiful, especially the collapse of the unholy bowers and the sudden apparition of Montsalvat in a glow of golden sunshine behind. The previous scene of the temptation of PARISAL by the Blumenmädchen and KUNDRY is a little too German and childish in the notion of magnified garden flowers of the gayest colours, like a huge piece of Berlin needlework. The colours are prettily managed, but the effect is artificial and not mystic. The first scene of the last act, a forest opening, with hermit's hut and the meadows flowering about the feet of Montsalvat, is very well planned, but suffered from the ill-straining of the background, which up to the last performance had an ugly and disillusionising fold across it. The tableaux generally gain immensely in effect and illusion from the practice of wholly darkening the auditorium and from the concealment of the orchestra, both points being really essential for that completeness of æsthetic influence which elevates the musical drama into legitimate and unfettered art.

The financial success of this year's enterprise and the growing resources of the Wagner-Verein justified the committee in announcing a repetition during July and August of next year, and if the same spirit of artistic conscientiousness carried into the smallest detail animate the performances as was manifest this year, in remembrance of the dead composer's wishes, one may prophecy a successful issue. It is not a little pathetic, whether one be an adherent of RICHARD WAGNER or no, after witnessing the magnificent result of his artistic energy at the great theatre on the hill, to come down into the garden of "Wahnfried" and see the plain slab of granite that covers his grave, by his own desire left without name or inscription of any kind. "One honours the remembrance of an artist," he said, "more by the performance of his works than by laments, laurel wreaths, and monuments." How far posterity will desire to justify his words time only can testify.

Meanwhile Baireuth lives upon the incidental honour of the *Bühnenfestspiel*, but fortunately for the dignity of such distinctive character as the old town possesses, does not break into any ridiculous renovations or elevations within, contenting itself with building villas and offices on the outskirts, and as yet with quite simple and sparse accommodation of shops, so that it becomes sometimes a puzzle to know how the Baireuth folk get clothed and fed withal. Altogether the place is not without attractiveness; massive houses with the deep picturesque roofing that gives colour and varied form, spacious irregularly-shaped *Plätzen*, a stately Schloss in the town, and a respectable residence with surrounding alleys and gardens, side streets that end in the fields or entice you into a silent *cul-de-sac*, a rococo monument or two, picturesquely ugly, in the squares; an old brown church of unpretentious Gothic, a river, the Red Main, that winds in unexpected places; the broken ground on which the town is built, the wide sweeps of wooded country around, backed by the high horizons of the Fichtelgebirge and the Frankische Schweiz, and an indescribable air of faded respectability that pervades the town itself, give a character of its own to Baireuth not without charm. On one side, a few miles out, is the château called the Fantasie, full of remembrances of MARIE of Orleans, wife of ALEXANDER, Duke of Würtemberg, and surrounded by park and woods; on the opposite side is the Eremitage, a one-storied, fantastic building covered with coloured spars, ingeniously worked into a pseudo-Classic design, which was erected by the Margraves GEORGE WILLIAM and FREDERICK, at the commencement of last century, and reminds one of certain descriptions in "Consuelo" of the great FREDERICK's days. A sort of deep arch, with side openings in the garden, has been used and possibly was designed for open air dramatic performances, by the present King of BAVARIA, the select audience ranging itself *im Grünen* beneath the trees. Nut-tree alleys and terrace walks and a tasteful admixture of the wild and the artificial in landscape gardening make the grounds of the Eremitage a pleasant resort, to which a restaurant outside adds that attraction of coffee and beer indispensable to the German sense of fitness. On the "off" days of the dramatic performances the carriages of visitors are driven as a matter of course to one or other of these two points, while the more enterprising take a further stretch into the Fichtelgebirge or the Franconian hills and valleys, through which the reader has accompanied us. Driving along at his ease, he might have seen, as we did, parties of young fellows, often shabby and footsore, trudging on foot into Baireuth—pilgrims, after the enthusiastic German fashion, to the old town

which enshrines for them the temple of an art faith; for it is one of the anomalies in the phlegmatic Teutonic temperament to be liable to acute fevers, such as the *Sturm und Drangfeber*, the *Wagnercult*, and the *Judenphobia*.

But the last performance at the theatre is over, and in two days Baireuth, as if by magic, is cleared of visitors, and falls back into accustomed slumber. We are off with the rest of the world, and strike down the valley of the Main to Bamberg, the picturesque head-quarters of episcopal dignity.

## PARIS NOTES.

THE latest details procurable concerning the Triennial Salon des Beaux-Arts, which is to be opened to-day, Saturday, show that it will contain 717 paintings from 372 artists. No limit having been fixed to the number of works admissible from a single artist, M. Alexandre Cabanel has sent as many as ten; M. Jules Dupré contributes eight hitherto unexhibited works; MM. Harpignies, Hébert, and Jules Breton each send seven; MM. Augé, Bastien Lepage, Bonnat, Choitrin, Guillaumet, Henner, Machard, and Meissonier each six; MM. Emile Breton, Débat Ponsou, Delannoy, Lecomte du Nouy, Philippe Rousseau each five; MM. Berne-Bellecour, Raphael Collin, Dubufe (deceased), François, Ch. Landelle, J. Lefebvre, Maignan, Maillart, Mesday, de Nittis, Pelouze, de Penne, Saintin, Thirion, J. Tissot, Valadan, P. Vayson, E. Vernier, and Vibert each four; while twenty-five other artists have each sent three. The sculpture section will contain 297 works by 154 sculptors. M. Barrias contributes six—the greatest number by one sculptor; MM. Lanson and Delaplanche each five; MM. Chapu, Guillaume, Injalbert, Marqueste Monly, and Thomas each four; MM. A. Lefevre, Isidore, Bonheur, Cavelier, Chatrousse, Chrétien, Crauk, Idrac, Labavie, Le Duc, Lemaire, Longepied, Mabile, Marioton, Mercié, Moreau-Vauthier, Printemps, and de St. Marceaux each three.

The first prize in the Ischia Tombola, a painting by M. de Nittis, has been won by a private in the French Artillery, who naturally accepted the 10,000 frs. offered by the committee in lieu of the picture.

The Académie des Inscriptions et Belles-Lettres has elected M. Paul Meyer, professor at the Collège de France and director of the Ecole des Chartres, as recipient of the Biennial Institute prize of 20,000 frs.

The Carnavalet Museum has just purchased an interesting drawing of a scene in the history of Paris by Prudhon, the celebrated painter, of *Justice Overtaking Crime*, which has long been possessed by the Louvre. The sketch represents the courtyard of the Bastille immediately after its surrender to the infuriated mob on July 14, 1789. The governor, M. de Launay, is on his knees before a group of armed men, begging them to spare his life, which they are preparing to take. Above, flying in the air, are three allegorical figures that bear a strong resemblance to the avenging angels in the Louvre picture.

The underground rooms at the Paris Observatory—intended to be always kept as near as can be to one temperature for the study of the magnetism of the earth—are now completed. In their construction, special attention has naturally been devoted to secure the greatest possible isolation and stability. An outside wall of the hardest limestone and concrete—6 feet thick—encloses a rectangular space of 40 mètres by 14. The rooms erected within this space are separated from the outside wall by a passage 6 feet 6 inches wide, the walls have a thickness of 2 feet 9 inches, and are also built of limestone and concrete. Each room communicates with the adjoining ones as well as with the northern gallery, where access is had to the upper air. The height to the keystone of the roof-arch is 12 feet; the vaulted roof is 3 feet 3 inches thick and is covered with 6 feet 6 inches of soil, the upper surface of which is covered with shrubberies and turf, so as to protect it as far as possible from the direct action of the sun and frost. Air shafts have been established in the two end rooms in order to combat the damp when required; the lighting will be done by gas, but, if the resultant heat should at any time become inconvenient, arrangements have been made for lighting from without by means of a series of powerful reflectors.

A Site has been fixed on for a high-class school at Dunfermline. The building, it is proposed, should accommodate about 300 scholars, the cost of the erection being estimated at about 5,900/.



## ART EXHIBITION AT STOCKPORT.

A FINE-ART exhibition was opened at Stockport, on Monday, by Lord Egerton of Tatton. Owners of private collections in the neighbourhood have lent many valuable paintings and other works of art for the occasion. Lord Egerton in opening the exhibition made a short address, and in the course of it he said that in nearly all the large towns of foreign countries the artisans had means by public museums and otherwise of seeing many of these works of art for themselves, but that in most of our local towns until quite lately there were no such provincial museums. In Italy in every large town there was a good museum and art gallery, and there were the churches always open, some of them containing a number of the most beautiful works of the Italian painters. These were open for the commonest artisans to enter, to study, and to appreciate, as they did most thoroughly. We could not compete with Italy altogether in that respect. We had not the same artistic wealth in this country handed down from previous ages as the Italians had, but we had a growing school of art in this country which required encouragement and education. In looking at questions of art we must remember that the span of human life was nothing in connection with the progress of art. As the old saying was, "Life is short, art is long," therefore they were, he trusted, doing something in endeavouring to set up a school of art in that town which would last beyond the lives of any present, and would have a lasting influence upon the trade and upon the manufacturers of the town. Even if he were to advocate such an art instruction on the lowest possible grounds, he would do so on the score of the pleasure which it conferred on those who studied it. That led him to ask what was art, and what was the object of art, such as they saw before them? The object of art, however manifold its phases might be, was, as he held, in the long run the study of nature in its highest processes and most beautiful forms. What could be more elevating and refining than that—to raise oneself from the commonplace present to the study of all that those who had made it their business to study nature had selected as the most beautiful and fitting. Therefore, he said that on every ground, on the ground of expediency and on the ground of producing good results to those who study art, the study of art was to be recommended in all our large towns. In conclusion, Lord Egerton urged the importance of the study of Indian art, seeing that this country has now the largest trade in the East that any nation has or is likely to have. Under these circumstances it was well that our manufacturers and artisans should study what was acceptable to Eastern customers, seeing that if we had not the markets of Europe we might have those of India, China, and Africa.

## M. CHESNEAU ON MR. MADOX BROWN.

M. ERNEST CHESNEAU writes in *La Peinture Anglaise*, Ruskin's last Oxford lectures, as follows: I have still to speak of two men who, though not pre-Raphaelites, are on the borders of pre-Raphaelism—Mr. Madox Brown and Mr. Burne Jones. Of all British painters the former is he whose art gives the largest amount of dramatic emotion. The second, in respect of colour and of intensity of mystical conception, of passionate poetry, is the greatest master of the existing English school. Mr. Madox Brown seldom exhibits, but in 1865 about a hundred of his paintings were shown at 191 Piccadilly. Amongst them was his *Farewell to England*, and the most celebrated of his pictures, *Work*, which the engraving has made popular, a composition of importance, full of philosophical and social meaning, the work of a moralist quite as much as that of a painter. It occupied twelve years of the artist's life. Its æsthetic principles are not those of the Latin race. We infinitely prefer the earlier works of 1845 to 1855—*The Virgin and Child*, *King Lear* and *Cordelia*, *Cordelia and her Sisters*, some beautiful landscapes and portraits, his illustrations to the Bible, his cartoons for the coloured windows of St. Oswald's Church at Durham, as also his *Haydée* of 1882. Perhaps Mr. Madox Brown's work is too abstract, perhaps it is sometimes too closely connected with the beginning of the Italian Renaissance, at least with Botticelli's tragical *Entombment*; perhaps he draws his inspiration too directly from the poets, but at any rate he takes us away from the vulgar pettinesses of real life. It must be said, too, that this very noble artist, who was the very independent friend of the pre-Raphaelites, has never accepted their exclusive æsthetic principles. If he had imposed on himself the rule of never painting except from the living model could he ever have produced his *King Lear*? He has always given much room to imagination, and has never been bound by any convention. He varies his methods according to his subject, and does so with the rarest address. The phenomena is so rare that as a proof of it we reproduce here four subjects belonging to the most different orders of feeling; passionate in *Romeo and Juliet*, deeply religious in *The Widow's Son*, historical with remarkable understanding of gesture and expression in *King Lear Dividing his Kingdom*, proudly heroic in one of the frescoes which the valiant artist is just finishing in the Manchester town hall. This task forms a

noble crown to a fine artist-career. We give the cartoon of one of Mr. Madox Brown's frescoes, *The Danes driven out of Manchester*. The reader will notice the admirably simple gesture with which the Danish officer shakes his sword just as he is going through the gate. Can we not hear his words? Does he not seem to say, "All right, we shall meet again!"

## TRADES' HALL COMPETITION, GLASGOW.

THE members of the Trades' House of Glasgow held a special meeting on Monday afternoon, when Mr. Reid occupied the chair. It was reported by Mr. T. Weir, the clerk, that Mr. J. Honeyman, architect, Glasgow, had presented his report on the six competitive designs for the new hall. The three Mr. Honeyman mentioned in the order of merit were: (1) "Unity" (estimated cost, 18,000*l.*); (2) "Bis I." (16,600*l.*); and (3) "Bis" (17,250*l.*). On the motion of the chairman, seconded by ex-Deacon Convener M'Onie, it was unanimously agreed to reaffirm former resolutions, to the effect that the existing buildings should be taken down and reconstructed on the present site, at a cost not exceeding 18,000*l.* The chairman moved that, subject to the approval of the various incorporations, reconstruction should take place in conformity with the "Unity" design; and that the incorporations should be recommended to take shares in the new building in proportion to those held in the present one. Mr. M'Ewan seconded the motion. In the course of a discussion which took place objection was taken to the fact that the hall, under that design, would be up two stairs, 28 feet above the ground. It was agreed to add to the motion a remit to the building committee to adjust with the architects any alteration that might be considered necessary. The acceptance of the "Bis I." design was moved as an amendment by Mr. Newlands, seconded by Mr. Marshall. On a division the original motion, with the additional remit, was carried by eighteen to eight votes. The sealed envelope which accompanied the "Unity" plans was then opened, and the authors of the design were found to be Messrs. Campbell, Douglas & Sellars, Glasgow, the architects for the St. Andrew's Hall and other public buildings in the city.

## TAPESTRY AT THE ZURICH EXHIBITION.

AN interesting display of ancient tapestries have been gathered together at the Zurich Exhibition. The specimens included are of almost every age and every class, from masterpieces of Mediæval art, with wide borders of imperishable flowers and scenes from sacred history, to embroidered hassocks, carpets, and altar cloths. One of the most ancient specimens is a grand linen carpet dating from the end of the 11th century, richly embellished with Romanesque designs and covered with mysterious symbols, the key to which has been lost. In a contiguous case is a similar carpet of the 16th century, on which is wrought a hunting scene, all the animals depicted being surrounded with thistles; and the general effect of this singular combination, though *bizarre*, is neither inartistic nor unpleasing. Another scene, depicted on a tapestry of the same age, is Bathsheba in her bath, with King David looking on from a balcony. A slave is offering to the beautiful wife of Uriah fruit and confectionery on a salver. Among the fruit are pears and grapes: among the confectionery some *braetzeli*, a sort of pastry as popular in German Switzerland now as it appears to have been in the 16th century, and which the artist evidently thought was equally popular in Judea. The patterns are wrought with white and blue yarn and gold thread. Many of the tapestries are emblazoned with crests, devices, and coats of arms. Among the most noteworthy, both by reason of their historic associations and their artistic merits, are the arms of Hans Krafft of Willisau, and of his first wife. Krafft served as colonel of the French Royal Swiss Guards, and was afterwards a magistrate of Lucerne, where he died of the plague in 1575. A tapestry worked in 1559 depicts the misfortunes of Jonas, and the fair artists by whom it was designed have bestowed upon the disobedient prophet features so unmistakably Zurich that you have only to look round to find a face that might have served as the original. Next in number to biblical scenes are episodes from the national history, the favourite subjects being the three Switzers taking their famous oath in Grütli meadow, Tell shooting the apple from his son's head, Baumgartner killing in his bath the murderer of Wolfenschiessen. Worsted tapestries are less numerous than those in linen, probably owing to the greater difficulty of preserving them. But among them are some exceedingly interesting and beautiful specimens, albeit the designs are less original and fantastic than those of the linen tapestries. One is the famous and incomparable tapestry of Kyburg. It is 1 mètre 64 centimètres wide and 1 mètre 89 centimètres high, and records the genealogy, with forty portraits in needlework, of the Dillingens, the Kyburgs, and the Dukes of Swabia. This tapestry bears the date of 1568, and an entire article might be devoted to its description. One of the cases contains specimens of ecclesiastical and sacerdotal tapestry. Many of these are of great splendour and



high antiquity. One, a Messegewand, dating from the 16th century, has for the principal figure a cross, on which are placed, wrought in relief, the effigies of a number of biblical characters. On another sacerdotal vestment is depicted a crucifix, and it bears in enamel the arms of a Margrave of Baden and a Countess of Saxony. This garment belongs to the 15th century, and is ornamented with gold and silver pendants. Still another priestly robe, a *pluviale* of the 14th century, though much faded and indifferently wrought, has an interesting history. It was embroidered by Agnes, Queen of Hungary and wife of King Albrecht, and given by her in 1318 to the Convent of Engelberg, to which it still belongs. A yet more ancient and not less interesting relic is a pair of shoes once worn by the Abbess Hildegard, founder of Our Lady's Church of Zurich. As the daughter of Lewis the German died in 859, these shoes must be more than 1,000 years old; yet one of them shows that the tradition which makes the Royal Abbess lame bears the impress of truth. Perhaps the most magnificent sample of needlework to be seen in the exhibition is an altar cloth (*antependium*) in white satin, wrought in the 17th century and sent by the Convent of Einsiedeln, whose property it is. In the centre is the *Ascension of the Virgin*, at each corner a landscape, all so perfectly executed that they may vie with the best paintings in enamel. Over the rest of the piece are strewn birds, flowers, and fruit, so marvellously wrought that, as a local connoisseur observes, it is necessary after examining it to make a visit to the machinery department in order to convince yourself that this is really an age of progress.

### THE CHELSEA INFIRMARY.

AT a recent meeting of the Chelsea Board of Guardians, of which Sir Charles Dilke, President of the Local Government Board, is a member, Dr. Bridges, Medical Inspector of the Local Government Board, said he wished to take the opportunity of congratulating the Board on the completion of their new workhouse building, which he had had the pleasure of carefully inspecting. It was extremely well constructed, and admirably adapted for the purposes for which it was erected. A short time ago he was inspecting the old infirmary rather carefully, and he should like to call attention to the sanitary arrangements, which did not compare favourably with those of the new building. No doubt many of the Board had noticed that in the latter there was a very excellent disposition of the soil-pipes, waste-pipes, &c., connected with the lavatories. He would like to urge the Board to make the same arrangements in regard to the infirmary.

The chairman, Mr. C. Blore, said he believed such an alteration was in contemplation.

Dr. Bridges was understood to say that at any rate there could be a better system of ventilation at the infirmary.

The new buildings are the work of Mr. A. Thorn, builder, and were designed and erected under the superintendence of Messrs. A. & C. Harston, architects.

### PROPOSED BRISTOL CHANNEL OBSERVATORY.

IT is proposed to establish a permanent meteorological observatory for the Bristol Channel. A design for the tower from the designs of Messrs. James, Seward & Thomas was lately published in *The Architect*. Mr. E. J. Lowe, F.R.S., who, for the last forty years, has carried on a regular series of meteorological observations at Highfield, near Nottingham, has recently purchased the Shirenewton estate, near Chepstow; and being convinced of the real importance of establishing an observatory which may be carried on through future years without interruption, he has generously offered to present the whole of his valuable collection of meteorological instruments, together with his books and papers, towards the establishment of such a permanent observatory, for which he also offers to give the site, together with such stone and lime as may be required for the erection of the necessary buildings, provided a sufficient sum can be raised in the district to build the same, and to provide a small endowment towards the maintenance of a limited staff of assistants, who would, in the first instance, be under his gratuitous guidance and supervision. Previous to making this offer publicly known, Mr. Lowe conferred with the Meteorological Department of the Treasury, by whom Mr. Scott, F.R.S. (the Director of the Department), was sent down, and his report was in every way most favourable, both as to the great utility and importance of the scheme, and also as to the admirable site which Mr. Lowe proposed to offer. In the present transition state of the study of meteorology towards an exact science, it is all important to establish some one or more permanent observatories where the barometrical and other waves may be carefully watched, especially the Atlantic waves, when they first reach the shore, and before they become more or less disguised by moving across Great Britain; for it becomes a question of importance how far the various conditions of such atmospheric waves become changed after passing across the

Atlantic, during their transit over an unbroken expanse of water. A more perfect knowledge of the weather on either side of the Atlantic would soon lead to a vast increase in our insight into the effects produced in the waves of air moving from the Equator towards the Pole, or *vice versa*. A more exact knowledge of these phenomena must be of infinite benefit to mankind in general, and to those engaged in maritime service in particular, by tending greatly to diminish the loss of lives and of ships. The laws of meteorology are far more stable than generally supposed, and, no doubt, owe their origin to cosmical causes outside this world. That the various phenomena are in a cycle, to be repeated again and again, must now be sufficiently obvious. The known fact that solar spots are in cycles, that the Aurora Borealis displays are more frequent at certain periods of the cycles, and that all these phenomena seem to obey the same law, and to be ruled by the magnetic cycle, are facts that must seem to point out that we are approaching that time when the laws of meteorology may be understood, and when we shall encounter no great atmospheric disturbance without a previous knowledge of it. The Governments of America and France have seen the necessity of this, and are devoting large sums of money to attain the object in question. In a country like England, where so much private wealth abounds, almost all important undertakings owe their origin to individual and corporate munificence rather than to the State; and until great discoveries are made, and their national importance recognised, the Government can hardly be expected to offer it material aid. Besides closely watching and accurately observing the various atmospheric changes that take place from time to time, there requires an almost inconceivable amount of careful uninterrupted work to thoroughly understand the laws of meteorology. England does not at present possess such an observatory as is proposed to be established, and it would be a great honour to any locality to boast of the first permanent station, the value of which cannot fail to be understood. The time is not far distant when observatories will be recognised to be as essential as our hospitals and other institutions. Meteorology is so intimately connected with health, navigation, and agriculture, that a joint study must prove of mutual benefit. If such an observatory were once established, there could be little doubt of its ultimate success financially. Donations and bequests from scientific persons would follow as a matter of course, and so soon as the general practical utility became recognised, the philanthropists would contribute as fully to the maintenance as to such other institutions which have already been shown to be a benefit to the community at large. The report of Mr. Scott proves that the advantages of such an institution would be great, far greater, indeed, than the exertions required in order to establish it. The establishment of an observatory in this part of Great Britain is most desirable, and urgently needed, while the particular site selected is second to none, having an extended and unbroken prospect scarcely equalled in the United Kingdom. The Bristol Docks Committee and the Bristol Incorporated Chamber of Commerce and Shipping have passed resolutions in favour of the proposal, while the Meteorological Council of Her Majesty's Government have said that if such a station were in existence, similar to the Bidston observatory in connection with the Mersey Docks Board, they would be perfectly ready to publish the returns with those of other climatological stations, and to have the station inspected regularly. Letters approving the establishment of the observatory have also been received from the Duke of Beaufort, the Earl of Derby, Sir G. B. Airy, F.R.S. (late Astronomer-Royal); Sir Joseph Hooker, F.R.S., Director of the Royal Gardens, Kew; Mr. Christopher Thomas, Professor Thomson, Dr. Burder, Mr. Henry Taylor (ex-Mayor of Bristol), Alderman Edwards, Mr. W. F. Denning, F.R.A.S., Mr. Thomas Howard (engineer of the Bristol Docks), and others.

### THE ARTISANS' DWELLINGS ACT.

DR. GRIFFITH, the medical officer of health for the parish of Clerkenwell, has reported to the Vestry of that parish that, pursuant to the provisions of the Artisans' and Labourers' Dwellings Improvement Act, 1875, he has made the following official representation to the Metropolitan Board of Works, viz.: That Bishop's Court, Smith's Place, and Slade's Place are unhealthy areas for the purposes of the above-mentioned Act, for the following among other reasons, viz., that the buildings comprising these areas are either unfit for human habitation, or that diseases, indicating generally low condition of health among the inhabitants, have been prevalent, as mentioned in sec. 3 of the Act, and that there is also a want of light, air, and ventilation, or proper conveniences to the houses or groups of houses within such areas. Dr. Griffith also informed the Vestry that there were a large number of unhealthy areas he would have to report upon. The houses mentioned above were very badly constructed, and should never have been allowed to exist for one hour. In some of them there were no back yards nor room for closets, and others were wanting in light and air, and all should be closed and done away with at once.



## NOTES AND COMMENTS.

IN most towns the authorities find a difficulty in preventing builders from encroaching on the normal or prescribed line for frontage. But in Huntly there is now a case where the law is supposed to be broken by keeping back buildings. The Brander Library has been set out in such a position, and, what is even more remarkable, the trustees say that the Huntly Commissioners cannot interfere. The clause in the local Police Act gives authority whenever "any part of a house or building projects beyond the regular line of the street, or beyond the front of the house or building on either side thereof." It is accordingly maintained that there is no power vested in the commissioners to do more than set back a house. The trustees have, however, declared their willingness to consult with their architect; but as the subject has been carefully considered before now, and no remedy was apparent, it is not likely that the building will be brought forward.

THE Huntly case is suggestive of a grievance through which architects and their clients often suffer. The lines for streets are laid down by town surveyors, who generally are indifferent to architectural effect. Sometimes a diagram is prepared to indicate the kind of buildings which are supposed to be best adapted for the new streets, and a collection of the suggestions would form a strange commentary on English official architecture. In fact, surveyors and town councillors are as fond of uniformity as are the railway engineers, who paint the exterior of all classes of carriages in the same colour. It is needless to say that for architectural effect it is not always an advantage to have the front of a building coinciding with the surveyor's line, and a great many buildings are sacrificed to the official regulations. If the local authorities consulted the amenity of their towns, they would be more disposed than they now are to allow occasional deviations from the surveyors' frontages.

THE late Mr. ALFRED B. RICHMAN, of the Strand, whose sudden demise was lately reported, was only 39 years old at the time he died. Having purchased the business of the late Mr. COOMBES, picture dealer, and succeeded to and carried on the business in the name of that person up to the time of his own death, Mr. RICHMAN was a most energetic man of business, and a successful picture dealer and picture restorer of no mean order. On the occasion of the recent restoration of St. Stephen's Church, Walbrook, the famous altar-piece, the *Stoning of St. Stephen*, was found to be in a very dirty and dilapidated condition, and the restoration of it was entrusted by the committee and their architect, Mr. THOS. MILBOURN, to Mr. RICHMAN, and the creditable and successful manner in which he fulfilled his task met with well-deserved praise at their hands. At the recent annual excursion of the Surrey Archæological Society he appeared in robust health, and responded to the toast of "The Ladies," and threw out some practical suggestions as to the advisability of ladies freely and often using their pencils in sketching objects of interest in Surrey, and thereby adding to the portfolios and sketch-books of the society.

WE learn that offers for undertaking works of re-edification in the island of Ischia are being continually sent to the Italian Minister of Public Works by Belgian, English, and French firms, accompanied by designs for various kinds of houses in iron, wood, or both materials combined. Italian firms have only made offers for furnishing the wood or iron. As the Italian Government cannot think of any definite erection of towns in Ischia, its work being at an end when the temporary barracks for the protection of the population are finished, it will scarcely accept any of the offers made. It will, however, directly accept offers for the erection of public buildings, such as schools, hospitals, churches, &c., expecting the expenses to be reimbursed by those for whose benefit they are made, or indirectly by subsidising and promoting the construction of houses by the commune or the province. Such offers will be accepted as present the most complete project and the surest guarantees. Peculiar privileges will be conceded. At present the idea is to grant ground gratis to anyone desiring to build a house, and the question of exempting or reducing the taxes on building, &c., is being considered.

GEORGE COLE, the landscape painter, whose death took place on Friday week, at the age of seventy-three, was a self-taught genius, whose career illustrates the power of strenuous application and perseverance to conquer untoward circumstances. He first became known at Portsmouth as a portrait painter. On removing to London he devoted himself to landscape painting. He first exhibited in 1840, and frequently thereafter at the Old British Institution. One picture, about the year 1845, *Don Quixote and Sancho Panza with Rosinante in Don Pedro's Hut*, attracted much attention. Among his many popular earlier works may be mentioned *Pride and Humility*, engraved by H. GRAVES & Co.; *A Welsh Interior*, *Ebenbergh Castle*, *Llandogo on the Wye*, *Homestead in Carnarvonshire*, and *The Last Load*. His more recent works will be fresh in the memory of the visitors to the Suffolk Street Galleries. In 1850 he was elected a member of the Society of British Artists. In 1864 the Society for the Encouragement of the Fine Arts awarded him their medal for a landscape which was remarkable for a brilliant effect of sunshine after rain. He is deservedly regretted by all who knew him.

THE exhibition of original drawings by RAPHAEL at the British Museum will give the public some notion of the wealth of the Department of Prints and Drawings. Some of the subjects will be familiar to readers of *The Architect*, as they were reproduced some years ago. The beauty of those sketches is remarkable, and, looking at them, it would appear as if RAPHAEL could not help producing graceful lines. Some of them are evidently the work of minutes rather than hours, and yet there is exquisite subtlety to be found in the curves. Those sketches enable us to comprehend the unrivalled draughtsmanship that is seen in the cartoons at South Kensington. But what is wanted is an exhibition that would correspond with the late PRINCE CONSORT'S idea. It was intended to have a collection at Windsor of copies of those drawings by RAPHAEL which were absent from the Royal portfolios. The trustees of the British Museum or the South Kensington authorities could easily make arrangements to exhibit photographic and other reproductions of drawings of which the originals are not available. In this way RAPHAEL'S marvellous industry would become apparent. The sketches would also show that GOETHE was right when he declared that RAPHAEL was the purest among modern artists.

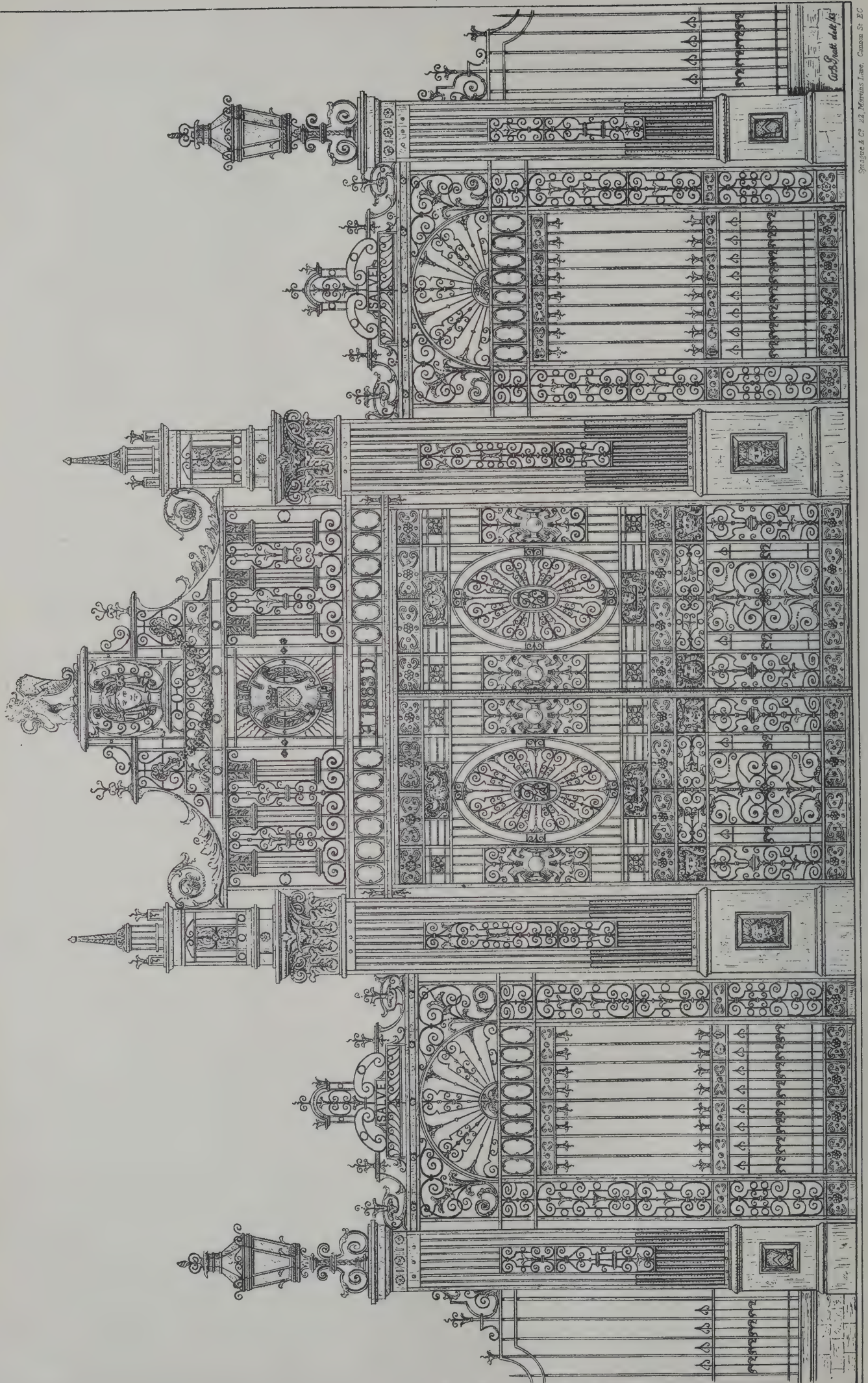
ON Wednesday last, at the Stratford police-court, a builder, of Leyton, was summoned for a breach of the by-laws in allowing a house in Oakdale Road to be occupied without giving the requisite notice to the surveyor of the board. It was stated in the prosecution that the defendant had failed to comply with the requirements of this section, and that the house, although occupied, was not connected to the main sewer. The importance of enforcing the by-law at the present time was urged, seeing that there were about 700 houses in course of erection, and, of course, it was almost impossible for the surveyor to know of the completion of a house if notice was not sent. The matter ended very properly in the defendant being fined and having to pay costs, though he pleaded guilty and had since connected the house with the sewer. A second and similar case having been heard in regard to another builder, payment of costs and fine was also imposed. We trust that Mr. DAWSON, the surveyor to the Leyton Local Board, will find that he will not be troubled again by such breaches of the law, after the salutary lesson that has now been given in his district.

SPECULATIVE builders, however, as well as other people, are always to be met with who are quite content to risk the chance of making some extra pecuniary gain by covert evasions of law. For one time they are caught tripping, they may escape scot-free some half a dozen times. It is questionable whether the small sums of money inflicted in the shape of fines on these gentry has a sufficiently deterrent effect to prevent others following their example. In the interest of the public it would be far more satisfactory if the law would sanction the imposition of a penalty of such magnitude that would once and for all render such malpractices impossible because no one would dare to court discovery, the risk being too great to be run,









Spangier & Co. 12, Mark Lane, Cannon St. 26

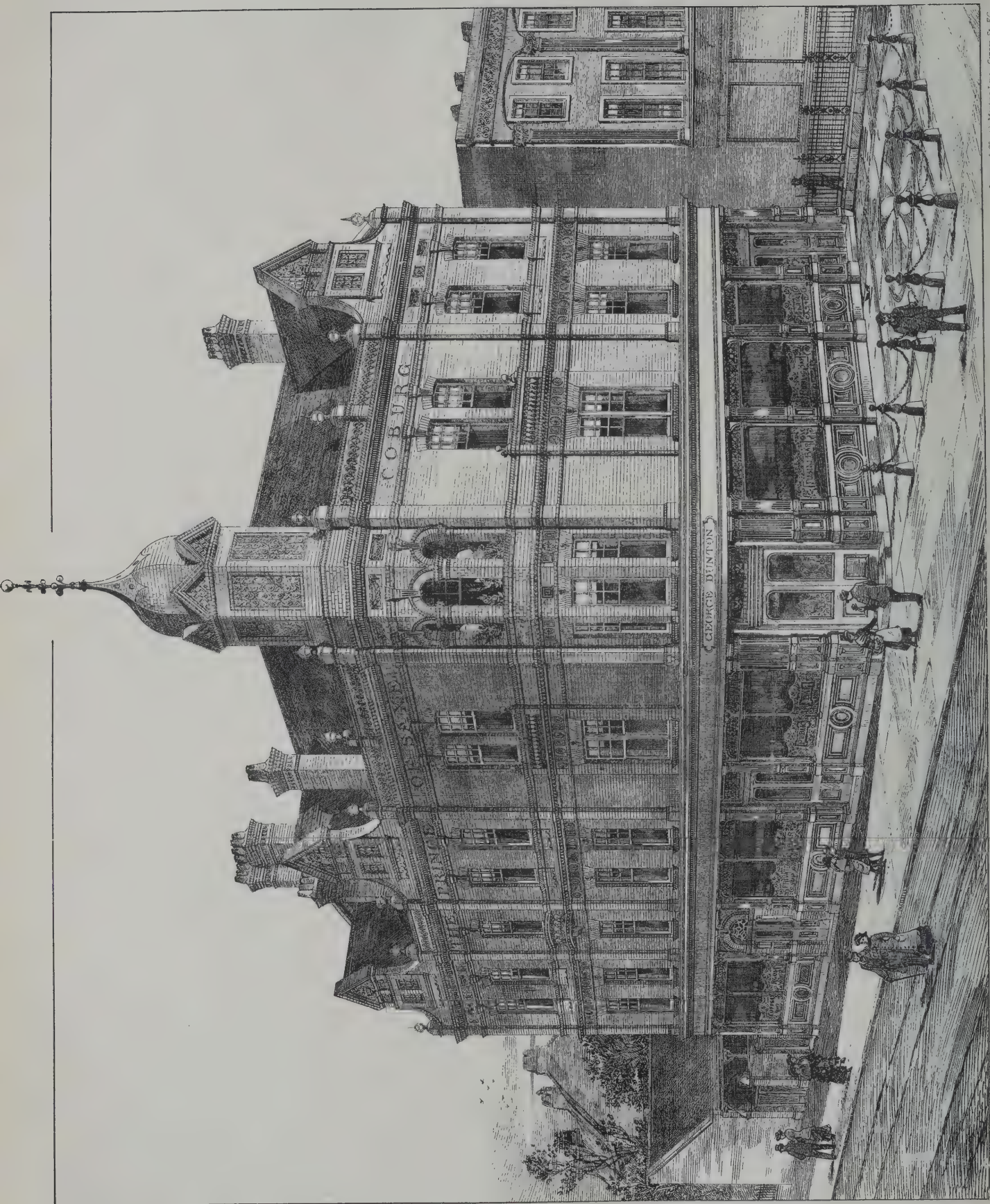
DESIGN FOR WROUGHT IRON PARK GATES.

By WILLIAM B. PRATT.









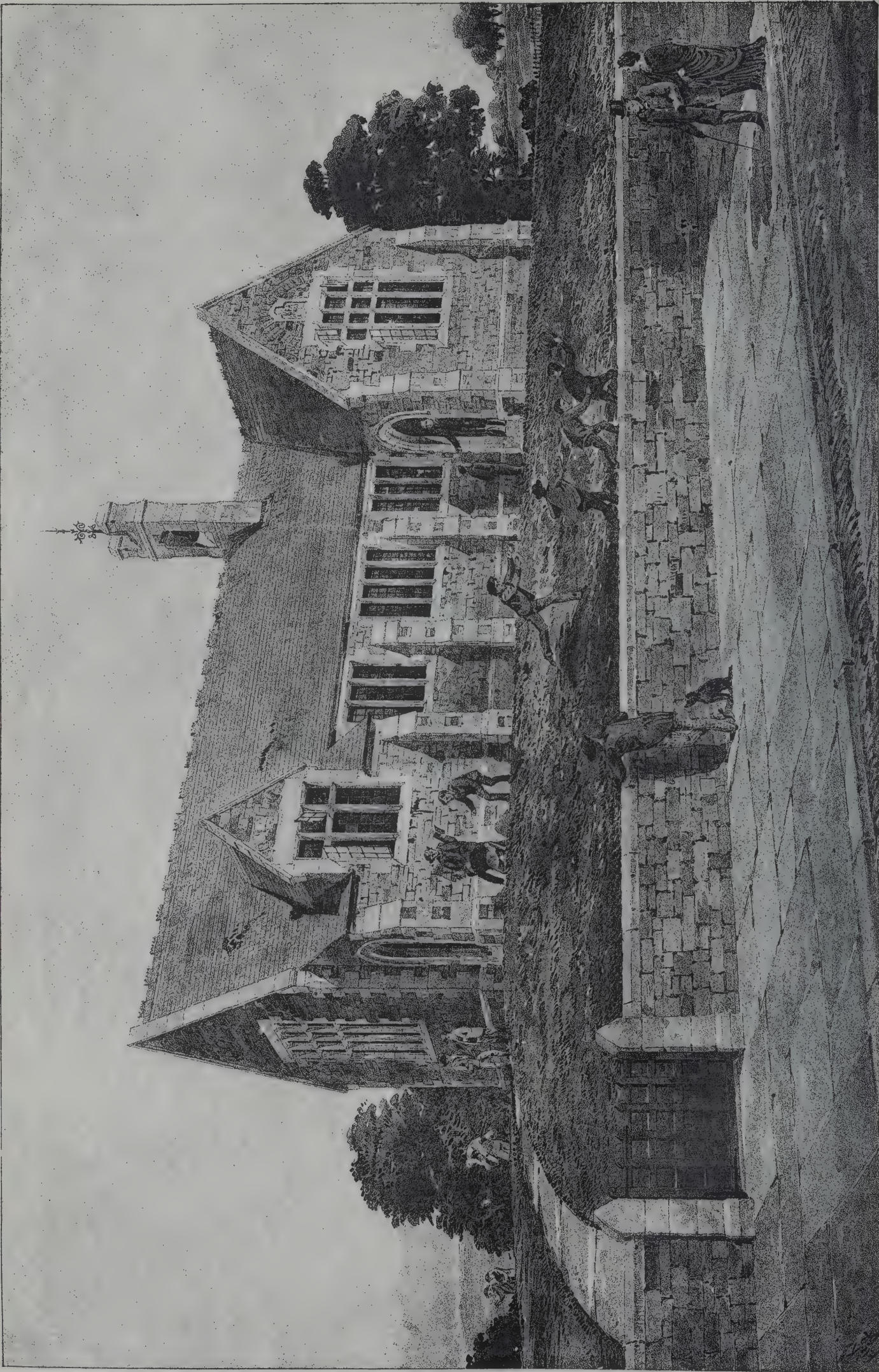
THE PRINCE OF SAXE COBURG TAVERN, OLD KENT ROAD.  
ALBERT VICARS, ARCHITECT.

Scoville & Co. 42, Mark Lane, Cannon St. E.C.



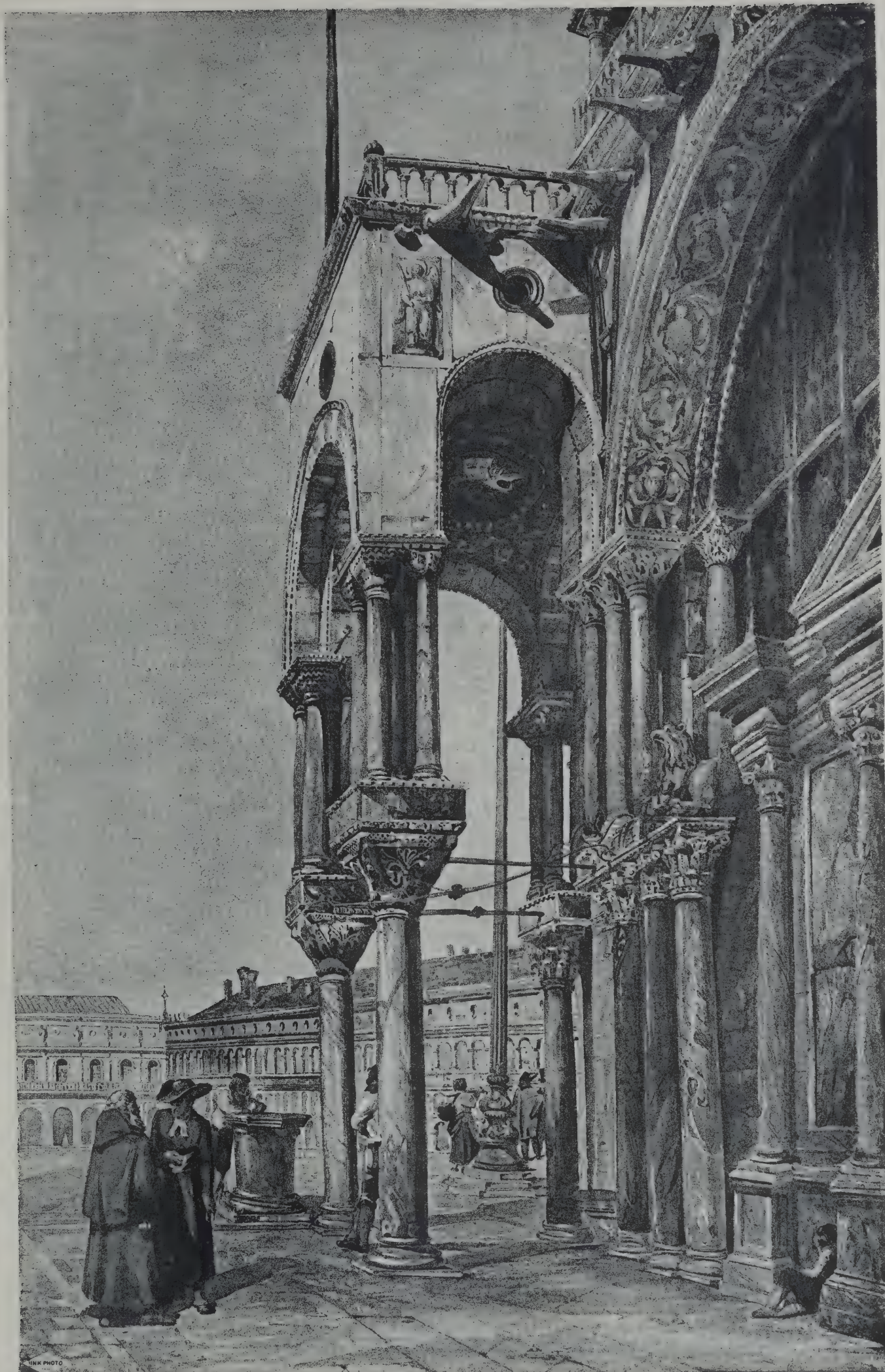






SCHOOL BUILDINGS, TRURO.  
JAMES HICKS, ARCHITECT.





Sprague & Co. 22, Martins Lane, Cannon St. EC

THE SOUTH WEST ANGLE OF ST. MARK'S CHURCH, VENICE.

FROM A DRAWING MADE BEFORE ITS RESTORATION

By JOHN P. SEDDON, ARCHITECT.









Basset Chambers corner of New Street - Bedfordbury, W.C. J. W. Brooks Archt.



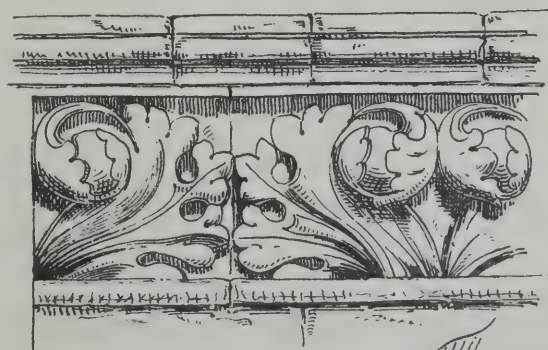
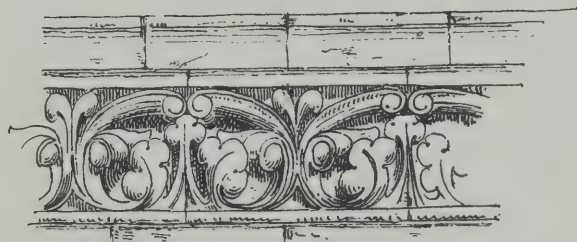
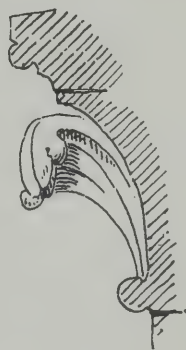
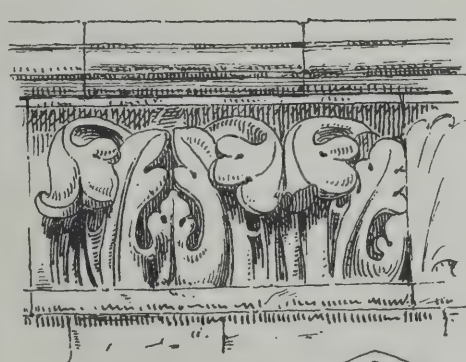
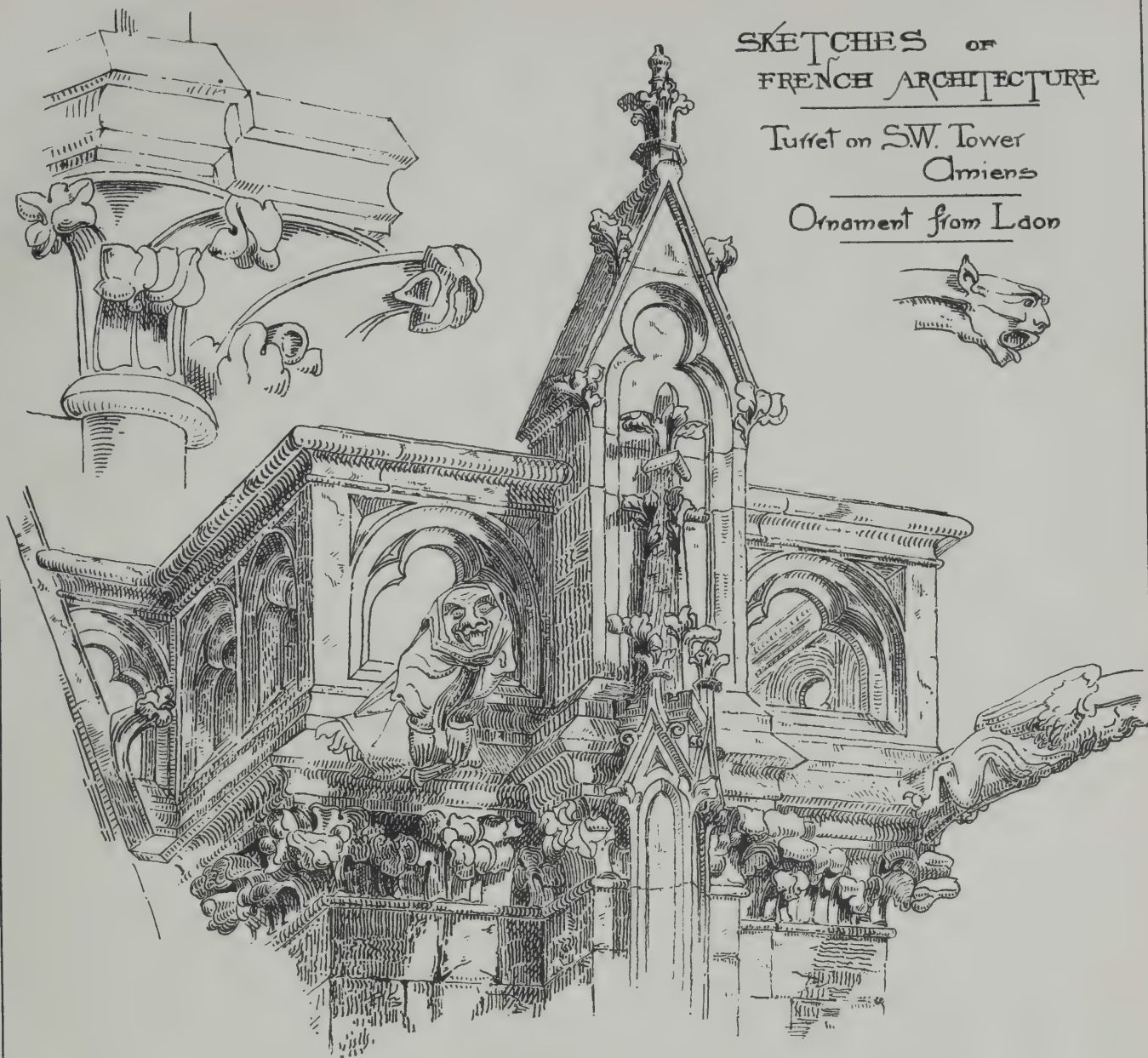




SKETCHES of  
FRENCH ARCHITECTURE

Turret on SW. Tower  
Amiens

Ornament from Laon



Edward W. Jennings, Del.



## INDUSTRIAL ART SCHOOLS IN BAVARIA.\*

WE went to the Kunstgewerbe Schule, where we found Professor Strähuber, who had been asked by the director to receive us and show us the class-room and such of the students' works as had been left in the school. It is a handsome building with a central court glazed over and decorated by the students. There is much space, but the rooms are not very well lighted for day class-rooms, the windows not being high enough. The school is meant for artisans, but it is impossible to exclude those who mean to become painters if they fulfil the necessary conditions. It is full, so that 40 per cent. of the applicants are obliged to wait for vacancies. Every student is obliged to go through the architectural course, and this may be somewhat deterrent to painters. If they go through it they become, *ipso facto*, somewhat qualified as decorative artists. We were told that the drawings of applicants for admission who were known to be workmen were judged more leniently than those of young painters. The Academy at Munich being full, many young people who want to learn to paint pictures wish to enter this school.

There are in all 180 students, of whom about forty are Bavarians, and of these twenty who have scholarships receive 365 marks a year and free instruction. No Bavarian who is in other respects properly qualified need be kept out for want of money to pay the fees if he can show, by a certificate from the burgomaster of his town, that he is really poor. There are not many such, only two or three. Many of the students come from other countries, and some of these have scholarships from their own governments or towns. Students must work a year in the school before they can hold the Bavarian scholarships. All must be over fifteen and under forty, and the charge or fee is 15 marks a term. In some cases employers pay the fees for their clever workmen, with the hope that they may become more useful to them as draughtsmen or designers. The hours are from eight to twelve and from two to seven, and there are no other evening classes, so men working at their trades can only attend by giving up their work while in the classes. For such, daily attendance is not required, and they may come on one or two days in the week provided they bring certificates to show they have been at their work on the other days. With others, regular attendance is insisted on, and those who do not comply with the rule have to leave. If absent for three days a student has to give an account of himself.

Decorative painters who are not able to follow their trade in the winter often attend the classes regularly during that season. Every student has at the end of each term a certificate on which the professors report as to his progress, and, at the end of his course, on leaving the school, he has another certificate as to his proficiency. There are four grades of these. Among the whole number of students there are fifteen or sixteen who are about to become teachers in other schools, and these have to go to the Polytechnicum for two years on leaving the Kunstgewerbe Schule, and thus their general cultivation is improved. These receive, when placed, from 1,600 to 2,000 marks a year, and have much time for their own work. For very small schools the curriculum at the Polytechnicum is not insisted on. After being one year (two terms) in the school the student must choose and declare the trade he means to follow, if he have not one already.

We saw a number of the drawings which had obtained admission for students. They were of ornament done in pencil or in black and white chalk or in ink. They were very neat and careful, quite unlike French work, and rather too pretty and ladylike for artisans' drawing. There is no drawing from flat examples. The very flat reliefs from Padua are used. The other ornaments in relief used as examples are very like our own. There is a class for flat ornament, such as drawings for stuffs, for wall papers copied from books or prints, for painted walls and ceilings in colour, and studies in tempera (compositions or arrangements) are made from artificial flowers. We saw other coloured drawings which had been done from ceilings in Italian palaces by students who had been sent on a twenty-five days' tour, also large pieces of coloured decorative work with figures and ornaments, 12 feet by 4 feet, designed and executed by students. We were told there were ten or twelve in the school who could do such work. People who wish to decorate their houses apply to the school. The work is generally done in tempera, but other methods are used.

Every month there is a competition, and small prizes (books) are given for the best competitions of ornament. These are not done in the school. There is a lecture theatre, and here the students learn perspective two hours a week, geometry four hours, and the history of decorative art three hours. In the antique room were many heads and limbs and some small figures but no large ones. We were told there was no room for them and the study from them was not considered important. There is a sort of time test when heads are drawn in a week on winter evenings. We did not see any drawings from antique figures.

There is a living nude male model sitting every day from 7 to 9 a.m. in summer and from 5.30 to 7.30 p.m. in winter, and about

forty students attend. There is no painting, only drawing and modelling. The draughtsmen sit on the inside of the semicircle, the modellers outside, and a sort of raised form is used by the furthestmost. We saw some of the drawings from the life. They are much smaller than ours, not more than a foot high. We saw no modelling of round figures, but bas-reliefs of about the same size as the drawings. These were good in their qualities of relief. The drawings were neat and fairly good. We saw some excellent round modelled studies done from drapery put on an antique figure and others in relief of a piece of hanging drapery. In winter two hours daily are spent by modellers in sketches for composition, and some of these sketches we saw gilded or coloured; for instance, a knife and fork with ornamental metal and enamelled handles. In one room, where ornament is drawn in the evening, we found the (relief) examples propped up on the desk before each student's seat. The appliances for lighting the living model and the students' work by gas seemed very good, and much like some we had seen in Paris. We saw some ornament modelled from the flat, and altered so as to make the exercise one of composition. This had been cast. There is a moulder in the school, and these casts are sometimes utilised as examples to draw from in smaller schools.

Decorative painting seems to be much encouraged. The school building, or part of it, was formerly a stained-glass factory, and two large rooms once used for setting up the windows against a large light are now used for decorative painting. We saw some large pieces of wall-painting copied at an old palace of the King of Bavaria, to which some students had been sent at the expense of the school. As before stated, they are sometimes sent to Italy. We were told of two having gone lately. They had 800 marks to spend, and on their return had to show their work and give three or four of their drawings to the school. There seemed to be no fixed time or rule for such expeditions, but sometimes the Minister on visiting the school offered to find money.

The students at this school are allowed to attend the anatomical lectures at the Academy. We saw very good models in wax for wood-carving, also a wax model of a boat or galley with a figure to be executed in precious metal. In a room on the ground-floor we saw some technical work in process, metal-work, *repoussé*, and chased; also enamelling. There was a small forge and an anvil, and an oven or kiln for the enamel.

The girls' school is in the same building. There we saw studies in oil from flowers—natural. There was nothing very remarkable about the art-work we saw. They do lithography and wood engraving; of the latter we saw specimens. They also design for woven stuffs and for embroidery. The designs we saw were not interesting or remarkable for invention or for artistic feeling, being much like those done by the men.

The Dresden Kunstgewerbe Schule is supported by the State, and there is a similar one in Leipsic. It has nearly three hundred students, and is always full. The boys (there are no girls) may come at the age of fifteen, or directly after they leave the elementary schools if they are otherwise qualified. They more commonly enter the Kunstgewerbe Schule late, having in the intermediate time attended the Fortbildung Schule, or some other. They are taken on probation for six months. The test examination is very much modified at the discretion of the director or professors. If a young man has had good opportunities of study a better drawing is expected from him to entitle him to come in than would be looked for from another who had come from a school where but little time is given to drawing. In the latter case a drawing from a flat example of ornament would suffice. In the former, one from a cast would be required. The school consists of two divisions. All pay 30 marks the first year, but afterwards some of those who are promising, and at the same time needy, have free instruction. Of such there are from fifteen to twenty. Some students come the whole time, and others, as in Munich, two or three days a week.

I will mention some of the students' works remaining in the school from the exhibition: Enlarged drawings done on squared paper for weaving for a small bit of stuff (silk) containing the repeat of a pattern. This is an exercise of a technical kind requiring little practice in drawing. Large drawings or tempera painting in black and white for lace curtains: the size of the woven stuff, very neatly and skilfully executed, needlessly so. A large coloured drawing of the corner of a carpet done apparently in squared paper, larger, but no better in design than some in our last national competition. Coloured drawings of advertisements and calendars with ornamental borders and figures very skilfully done, very German in style, to be executed in chromo-lithography. They were mostly done by a student of twenty, who had been three years in this school, but in his trade as a lithographer had worked at this kind of thing before. He was then painting, from nature, figures and still life in oil, and the professor said he showed no tendency to leave his trade in order to paint pictures. A few water-colour copies from flat examples, which were pretty well done, but seemed to serve no purpose beyond the amusement of the student.

Some very clever but mannered drawings in water-colours were shown us of the size and character of our Christmas cards. They were meant for reproductions in colour-printing, for which they were well suited. In them flowers and figures were arranged with

\* From the report by Mr. T. Armstrong, art director, Science and Art Department.



ornament, but treated in a realistic manner. We were told that the student who did them was only seventeen, and had been but two years at the school. I expressed surprise, and then the explanations given were that he was a lithographer, and had been doing this work before he came to the school. They were most deftly done, without being remarkable for anything but their execution. A small coloured drawing of ceiling decorations and others of jewellery were very neatly executed.

A young man of twenty-one, who had been a year and a half in the school, brought a drawing he had just finished to show us. It was a festoon of roses of different colours, with the leaves done rather above the size of nature on a grey ground in tempera. It was like the work of a clever French decorator, but rather harder. Natural flowers had been used as models, and the work, which pretty well filled a space of 4 feet by 1½, had been done in five days. We saw two or three other works of a similar kind, among others an upright panel of flowers in tempera, arranged and painted with a reference to nature on paper, about 5 feet high by 1½ wide. They were much like the clever French paintings, but not so good as the best internal decorations in Paris cafés.

Some studies of flowers and fruit done in tempera on tinted paper without background were much better, some of them very good, but they were simply copied from a small group without arrangement. We saw a student painting a still-life group very much like those set up in our schools. This was said to be his first work in oil, but the execution was dexterous. We were told he had already painted a good deal in tempera. Other paintings in oil from the same group were very cleverly done, with a certain bravura of manner. None of these things were better than such work done in our own schools at South Kensington. There were some well-executed drawings of cabinet-makers' work; not better, however, than would be produced in the best shops in London.

Small plaster casts of Renaissance ornament had been used as models for sgraffito work, and had been enlarged, somewhat altered, and drawn out flat. The same process was gone through as an exercise in colour, for flat decoration, the relief ornament being translated into flat coloured decorations; a very useful exercise. A large and well done heraldic drawing in tempera was shown to us. These works had all been in the recent exhibitions, and cannot be accepted as examples of the average work of the school. We saw some but not many drawings of ornament. They were done with the stump and the point together on tinted paper, with black and white, well modelled, and very neat. The process seemed a laborious one. Of drawings from the antique we saw none. There were studies from the nude male model unusually large, 2 feet high, in which much white was used on tinted paper, and with background; a very vicious method. There were some smaller drawings from the life about a foot high, like the large ones done with a dexterous mannered touch; also careful drawings of skulls and of heads done from casts taken after death. These latter were executed with the point in ten sittings of two hours each. They had backgrounds. Similar drawings of heads—portraits of living persons—were there, in which charcoal was rubbed in with the finger, a stump not being allowed.

Professor Donadini explained his own method to us. When a student comes first into his hands he gives him some object to draw, and when this is done to the best of the young man's ability he decides whether it is worth while for him to go on. If it is, he puts him for a month to such work as he has already done, perspective and anatomy, and afterwards proceeds to teach him the technical part of the work to which he means to devote himself. If he is to be a lithographer or engraver, he learns to draw with lines. After drawing casts taken from nature (heads of dead people) and extremities, he does the same kind of work from life, and then proceeds to paint heads from the living model. He encourages his pupils to carry sketch-books always, and to use them in every-day life constantly. Anatomical sketches are made at home. Next comes drawing, and then painting, of the whole figure from the nude model. (We saw no such painted studies.) Every month he gives a subject for composition of the figure, treated decoratively. He told us that he has not found this painting from the living model dangerous to his students of decorative painting, as it is said to be by the Paris professors, and that none of them have left their proper work to become painters of pictures. We saw his own work, and found that he is an extremely skilful decorative painter of the higher kind. He had designs and models of considerable size of ceiling and wall paintings, which he had executed on a large scale. Though a Venetian, his artistic education was got under Piloty, of Munich; but there is something which is not German in his work. He gave us the impression that he is an enthusiastic teacher, and he showed us how he trained his advanced pupils to follow in his steps. In his studio there was a plaster model of a complicated ceiling, and from this he told us he cut out in paper the shapes of the different spaces to be decorated, and distributed them among the advanced students with instructions as to the general scheme of decoration. When these were done he put them into the spaces and criticised them afterwards, taking them out again and again for alterations and corrections, until a harmonious whole was arrived at. He said his pupils had executed a short time ago the painting of a very large triumphal arch which was put up for the

opening of the exhibition, and also a temporary ball-room in the royal palace. To these opportunities, to Signor Donadini's personal influence and talent, and to the carefully studied scene painting and *mise en scène* of the Dresden theatre, I attribute the skill shown in decorative painting. All methods of painting are taught, and tempera is especially encouraged.

We saw plaster casts of ornaments which had been modelled by the students, probably from flat examples, or enlarged and modified from small plaster examples. They were not good. There was a branch of a bay tree modelled in rather high relief, which was better. We were not shown any round figures, but several reliefs done from round examples or from photographs, the figures from the Medici tomb, and the *Adam* of Michael Angelo. These were rather large, about 3·6 high; and there were some male figures and some antiques of the same size; also a large anatomical study of legs. They were not very good, not so good as the best at South Kensington. There are evening classes in this school, which are not thoroughly organised yet. They are under the State, but are helped with money from the Kunstgewerbe-Verein. Here the students pay two marks the term, and are taught geometrical drawing, drawing from flat examples, and from casts.

## THE FAÇADE OF OLD BURLINGTON HOUSE.

MOVEMENT has been set on foot with a view of inducing the First Commissioner of Works to consent to the utilising of the façade and colonnade of Old Burlington House, which has been described as "one of the finest pieces of architecture in Europe," by embodying it in the main entrance to the new exhibition buildings in course of erection in Battersea Park. The colonnade, which was borrowed from a palace by Palladio, at Vicenza, together with the façade, was erected, according to Horace Walpole, by Richard Boyle, Earl of Burlington—himself a famous architect—in 1718, from his own designs; but Colin Campbell, in the "*Vitruvius Britannicus*," claims the merit of the design, including the gateway. The colonnade was the subject of an animated discussion in the House of Commons in June 1868, when Mr. Beresford Hope asked Lord John Manners, the then First Commissioner of Works and Public Buildings, whether it was true, as advertised in the London papers of the day, that Her Majesty's Government proposed to sell by auction the façade and colonnade of Burlington House, and if, for the sake of a few paltry pounds, such an act of vandalism was to be perpetrated, instead of preserving them to the nation by re-erecting them either at Kew, South Kensington, Kensington Gardens, or elsewhere. Lord John Manners, in reply, humorously suggested that he was open to receive a private offer for the purchase of the stones, but was at the same time prepared to consider the advisability of employing them as suggested. The result was that they were withdrawn from public sale, and as the stones were taken down they were numbered and carted away to Battersea Park, where they have lain ever since.

## MR. RAWDON BROWN.

A CORRESPONDENT has furnished the following particulars concerning the late Mr. Rawdon Brown, premising that the public are already acquainted with that gentleman's life and labours as an antiquary or "archivist," in the service of ancient Venice. We feel what that industry must have been which gave even a passing glance of attention to no less than 12,000,000 packets of manuscripts and other papers. But to those who did not know him, and perhaps still more to the comparatively few survivors who had that privilege, it may be interesting to hear something more of the man as well as of the student. It is now more than fifty years ago since he first entered that city as a traveller which he was destined never to leave again for more than brief periods of holiday. Venice was marked out for the natural home of Rawdon Brown, and he for her most devoted son and servant. Her "stones" aroused at once all the enthusiasm and dogged patience and determination of his nature, and he so soon peopled the amphibious old "Dominante" with the life of the past that, walking or floating with him through her network of passage and canal, such a period as the 19th century no longer existed. He knew the annals of every chief family, the origin of her innumerable escutcheons, and the dwellers associated with her most squalid "calli" and "campi." "A friend of mine once lived here," he would say, pointing to a court distinguished by more than common dirt and dilapidation. The immediate inference was that some modern Venetian, or, perchance, English visitor, had resided there, when it would turn out to be the father or brother of one Thomassina, a Venetian lady of the 15th century, who married a King of Hungary, whose letters he had lately unearthed. He was very jealous that all who ventured to treat Venetian subjects should observe the same faultless accuracy that he had attained, and no one detected the lack of that quality so readily. M. Yriarte's account of the Château of Maser, decorated by Paul Veronese, in his "*Vie d'un Patricien de Venise*,"



was a standing subject of protest and wrath. "Why, Maser has been the resort of Venetian holiday folk for years and years, and here comes a tinker and pretends to have discovered it!"

Rawdon Brown had his favourite discoveries and theories, with which he eagerly sought to imbue some listening companion. There was, for instance, the discovery of the three mulberries in the Moro arms, which Shakespeare had converted into the three strawberries on Desdemona's handkerchief; there was the theory of the Duke of Lerma's having served Cervantes as the original of Don Quixote; and there was some other theory connected with Margaret of Anjou's handwriting which, it must be owned, was rather obscure. But woe be to the listener who was not attentive! No one could be sure that he would not cross-question you next time. The inattentive listener was soon dismissed with some hint of "pearls before swine," while for one who had stood the examination with credit there were various rewards in store—a sight of Memling's breviary or of Marino Sanuto's diaries, which St. Mark's Library opened at his bidding. That library table could tell much about the departed English student. Day after day and year after year (the vice-librarian Lorenzi having regularly breakfasted with him at 8 o'clock), Rawdon Brown's truly English head, with his shrewd, shaven face and close-cut hair, would be seen poring over some dull and dusty delicacy; and equally, day after day and year after year, did his tall, slim, and well-knit figure, after his task was done, appear on the Grand Canal, rowing himself, gondolier fashion, to the Lido. It is long since he paid a visit to England. Some years ago he prepared to do so, but, stepping to the window, he looked down on the Grand Canal, all quivering and sparkling with the reflections from the Grand Bevelacqua Palace opposite, and, turning to his servant with a face of emotion, he said, "Toni, unpack my things; I cannot go."

It was but natural that Brown's friends should recommend the English Government to turn his knowledge and powers of research to practical purpose by engaging him to calendar such Venetian State records as bore upon English affairs.

Rawdon Brown was an inveterate Conservative. He never troubled his head with dreams of Italian unity, which he only associated with the supremacy of the mob and the destruction of manuscripts. He valued, also, the polished Austrian circle in which he had been a welcome guest, and grudged the loss of the privileges of a free port; but he lived to be reconciled to the change. His funeral took place on August 28, and was attended by old friends, Italian and English. His beloved banner of St. Mark, with the winged lion, was obtained from the Municipality by the Countess Pisani, an English lady and friend, and wrapped round him in the coffin. The service was held in the Protestant Church at the SS. Apostoli, and a funeral discourse read over him in the name of the authorities of St. Mark's Library by his friend Cecchetti, Director of the State Archives at the Frari, who set forth the pure and simple life of one whose zeal for the honour of Venice, knowledge of her history, and unostentatious charity to many of her humble citizens had converted from a stranger and foreigner to one whom they were proud, grateful, and eager to claim as their own—*il nostro*.

He now lies in that cemetery island against which the waters of the Adriatic perpetually break—a man of no common heart and head, crusty and odd occasionally, it might be, but racy, humorous, generous, faithful, and tender, the type of the bookworm, the old bachelor, the warm friend, and the true gentleman. Venice will hardly be Venice without him.

#### PATRINGTON CHURCH, HOLDERNESS.

THE annual excursion of the Yorkshire Archæological and Topographical Society was made to Holderness, where the parish church, dedicated to St. Patrick, "the Queen" or the "glory of Holderness," was inspected. The church is in the Decorated style, and was probably built during the early part of the reign of Edward III. It is cruciform in plan; the front consists of a solid block of granite covered with sculpture, and there is an Easter sepulchre in the north wall of the chancel. Mr. Micklethwaite, F.S.A., in explaining the architectural details of the sacred edifice, said that was the first time the members of that society had met in an important parish church, although they had had a great deal to do with abbey and collegiate churches. He should say that nearly all parish churches stood on sites that were occupied in the same way even before the coming of Augustine. Parish churches could be traced back to the time of the first stone church, which, if not of Saxon, was of twelfth-century work. The church in which they were assembled was generally stated to have been built entirely new out of the ground, all of one style, and purely fourteenth-century design. He hoped he should not offend anybody by saying it was not. It was not built out of the ground, unaffected by what was there before, and was not entirely fourteenth-century style. He had no doubt that where the screen is was originally the chancel, and that this and other features were the result of the site having been previously occupied by a church which was not entirely demolished until there was provision made for worship in the new building. One feature of the church was the extreme development of the

transept, the windows at each end of which were distinctly of an earlier period than the other windows. Having dwelt on various interesting features of the structure, Mr. Micklethwaite said it was attributed to a canon of York of the latter part of the fourteenth century. He thought that a mistake, and that the work was a little earlier than that, and that the erection was probably interfered with by "the black death" which desolated this country in 1349. Regarded architecturally, it was a great deal more of a Lincolnshire than a Yorkshire church, and a good deal of the detail was similar to that of Eckington Church.

#### REVIEWS.

THE ARCHITECTURAL DESIGNS OF WILLIAM BURGES, A.R.A.

Edited by R. P. PULLAN, F.R.I.B.A. Published at 15 Buckingham Street, Strand.

The time has hardly arrived for determining the position which the late William Burges is to hold in the history of English architecture. He was not fortunate in finding opportunities to manifest his capabilities. A church or two, a few houses, a small cathedral, and a castle tower are all that posterity will have as evidence of his powers. But, rightly studied, the buildings may suggest that William Burges was a great artist, who had discovered for himself those principles which are the basis of all that is good in architecture. His Gothic was unlike the Gothic of his successful contemporaries, inasmuch as it possessed more of the severity of ancient work in its contours, and more of the charm which sculpture and painting can impart to a building, when introduced with that insight and regulated by that judgment which is only to be found in men of genius. It is not, therefore, by designs or sketches that he should be judged but by completed buildings, of which unfortunately too few exist.

Mr. Pullan has reproduced illustrations of the buildings which have been constructed from Mr. Burges' designs, with some of the designs which were never carried out. Among the latter are the Memorial Church at Constantinople, the Law Courts, and the Edinburgh Cathedral, three splendid examples of architectural invention. The illustrations of actual buildings represent the Cork Cathedral, the tower at Cardiff, a house at Cardiff, the mansion of Knightshayes, Studley and Skelton churches, the Dover town hall, and his own house at Kensington. In all there are seventy-five plates; they vary in merit, and of some it must be said they are hardly worthy of the subjects. But architects will be able to make allowance for defects, and a student who has seen one of the buildings will be able to understand what blurred lines represent. The interest which the volume possesses as a memorial of William Burges is sufficient to compensate for many shortcomings.

SAW-MILLS: THEIR ARRANGEMENT AND MANAGEMENT. By M. POWIS BALE, M.Inst.M.E. (Crosby Lockwood & Co.)

Mr. Bale's book treats of an important subject, and in it is explained not only the process of cutting timber, but a good deal of information is given about the qualities of the timber generally used in this country. The arrangement of saw-mills is described, and the machinery and tools which are in use are analysed with the skill of a practical mechanic. The book will be useful to the managers of saw-mills and woodworks. It will also be invaluable to many an estate manager in England, Scotland, and the colonies.



Hawick Town Hall.

SIR,—In "Notes and Comments" in *The Architect* for Sept. 1, there is a reference to Mr. Honeyman's decision in the Hawick town hall, upon which I should like to make a few remarks.

Mr. Honeyman, it seems, has satisfied himself that nearly all the designs submitted in competition could not be built for the sum of money stated in the conditions. If that is so, permit me to state emphatically my conviction that he was right in rejecting those designs.

The position of professional adviser in the decision of a competition is one that I have not infrequently had the honour to fill, and I know that there is no small temptation to recommend for adoption the design which is really the best, though it may have thrown over some of the instructions. But a professional assessor must remember that he is a kind of trustee for his professional brethren, and further, that his duty to his employers is to keep them from doing an injustice quite as much as to help their judgment. The few guineas he gets from his clients do not constitute such a bond between him and them as that which exists between himself and the profession by which he lives, and to which he and all the other competitors are bound by most intimate ties. Perfect fair-



ness towards the competitors as well, let me add, as perfect fairness towards the employer, require that if the *assessor is really satisfied* that a design is beyond the limit of outlay, and if that limit was a definite and fixed and unchangeable condition of the competition, the design so exceeding should be set aside, and the profession has, in my humble opinion, reason to congratulate itself that Mr. Honeyman has acted as he has done.

Your obedient servant,

T. ROGER SMITH.

#### The Iron Curtain at the Royal Lyceum Theatre, Edinburgh.

SIR,—This curtain at the stage opening, the first of its kind in the United Kingdom, has been erected for me by Messrs. Clark, Bunnett & Co., of London. It measures 30 feet 6 inches wide by a depth of 28 feet 6 inches, and is constructed of two screens of wrought-iron plates one-eighth of an inch thick, with an air space between of 6 inches. The top portion of the curtain is framed and rivetted to double wrought-iron girders secured to the heads of hydraulic rams, which are fitted with their cylinders on each side of the proscenium opening.

The supply of water for working these rams is laid on from the town mains, and with an expenditure of only eighty-four gallons of water, the curtain, about six and a quarter tons, is raised or lowered in fifty seconds, the movement for working it being on the stage under the control of the prompter, thus forming, with the brick proscenium wall, a fire-resisting division entirely separating the stage from the auditorium.

The curtain at the opening of the theatre on Monday night last worked admirably, and in my opinion quite solves the question which has lately been so much discussed.

Your obedient servant,

CHARLES J. PHIPPS.

26 Mecklenburgh Square, W.C. :

September 12, 1883.

#### CHURCH BUILDING AND RESTORATION.

**Bromsgrove.**—The foundation-stone has been laid of a new church for the ecclesiastical parish of Finstall. Mr. J. Cotten, Birmingham, is the architect, and Messrs. Brazier & Weaver, Bromsgrove, are the builders of the new church, which will consist of nave, transept, south aisle, and basement of tower and spire, and will be capable of enlargement at any time by the addition of north transept aisles to the chancel and completion of tower and spire. There will be open sittings for 262 persons.

**Kirkcaldy.**—The old free church of Abbotsshall has been reconstructed from plans of Mr. John M'Lachlan, architect, Edinburgh. The frontage of the church is in the Gothic style. There is sitting accommodation for 834 persons, and in addition there are a vestry and class-room, which, by means of folding doors, form, along with the lobby, a convenient hall, capable of accommodating from 150 to 200 persons. The total cost of reconstruction and endowment will be over 5,000*l*.

**Northallerton.**—The nave and aisles of All Saints Church have been reopened after undergoing restoration. The church has been re-roofed and restored on the original lines; the walls inside have been stripped of whitewash, and the windows have been re-chiselled and filled with cathedral glass. The architect was Mr. Fowler, of Durham. The contractors were Mr. J. Dodgson, stonework; Mr. J. Wilson, woodwork; Mrs. Naylor & Son, whitesmith and gasfitting. The total cost of the restoration will be above 5,200*l*., towards which sum 4,000*l*. has been promised.

**Diddlebury.**—The parish church of Diddlebury, dedicated to St. Peter, has been reopened, after reseating and rearrangement of the interior. The old high pews have been converted into open seats; the floor under the seats is laid with wood blocks upon a bed of concrete, and the aisles with Godwin's tiles. Two arches have been thrown across the Cornewall Chapel for an organ-chamber and vestry. A new porch has also been erected. The work was under the superintendence of the diocesan architect, Mr. Thomas Nicholson. The contractors were Messrs. Jones & Sons, of Sedgely, near Dudley.

**Griston.**—The parish church of Griston has some time past needed repairs, as owing to dilapidations the roof was no longer weather-proof, and a settlement having taken place on the south side, the chancel arch was greatly out of the perpendicular. Mr. J. B. Pearce, F.R.I.B.A., of Norwich, after making a general survey, gave in his report, recommending an entirely new roof to the nave; that the chancel arch and part of the south wall be taken down and rebuilt; that the floor be raised and new tiling laid down; that the north porch be restored, and other exterior parts of the building be put in repair. The work has just been commenced. Unfortunately, after taking off the roof, the examination of the south wall showed that the foundations were in a most defective state. It has consequently been necessary to take down the whole of the south wall, and put in new foundations on which to rebuild it.

**Littleworth, Berks.**—A new vicarage-house, with offices and stabling, is now being erected in this village, from plans and specifications prepared by Mr. F. H. Barfield, F.S.I., architect and surveyor, of Faringdon, Berks, at a cost of about 1,300*l*. The walls are of local stone with red brick dressings, the covering of Broseley tiles, and the internal woodwork stained and varnished. The builder is Mr. George Cooper, of Aylesbury, Bucks.

#### SCHOOL BUILDINGS.

**Loughborough.**—The trustees of the Sunday schools in connection with the General Baptist Chapel, Baxter Gate, Loughborough, have decided to erect additional schools, as the present ones provide insufficient accommodation. The proposed buildings will be erected on a piece of land belonging to the trustees at the back of the chapel and close to the old schools. The new schools will accommodate about 250 children; the existing ones accommodate 500, so that when the works are completed there will be school accommodation for 750 scholars. The architect is Mr. Hampton, of Loughborough.

**Barnard Castle.**—At a meeting of the governors of the North-Eastern County School, held in the lecture room, Palace Green, Durham, Canon Dwaris presiding, Mr. Johnson, the architect, reported that eighty-three tenders for the erection of the schools and buildings at Barnard Castle had been received. Sixteen contractors went for the work in its entirety, and the remainder contracted for the various items of work. The governors, after discussion, agreed to accept the tender of Mr. Kyle, contractor, of Newcastle-on-Tyne and Barnard Castle, at the estimated amount of 15,448*l*., which was the lowest offer; the highest tender being 23,181*l*. This action is subject to the approval of the Charity Commissioners.

**Cardiff.**—A new Board school and teachers' house has been erected at Super Ely, near Cardiff, for the combined districts of St. George's and St. Bride's, and was opened on the 3rd inst. Messrs. Blessley & Aspinall, of Cardiff, have been the architects, and Mr. Miles Thomas, of Llantrissant, the builder.

#### ENGINEERING WORKS.

**Railway Extension.**—The increasing suburban traffic of the Great Eastern Railway Company has necessitated a large outlay in the construction of several additional lines of rails between Stratford and Liverpool Street, and these lines—four in number, four miles in length—have for some time past been in progress. The last contract in connection with these works was entered into about a fortnight ago, and the contractor has undertaken to have the whole of the works finished and ready for traffic by the beginning of the ensuing year. For the purposes of the traffic, it has been necessary to purchase a large amount of property on the north side of the main line, more especially in the neighbourhood of Bethnal-green, Bow, and Coborn Road; and at the last-named place a new and much enlarged station has been erected, the platforms of which are upwards of a thousand feet in length. In the rebuilding of this station it has been connected with Grove Road. Another new station has been built at Devonshire Street, and the authorities of the railway have expressed an opinion that the traffic between these two stations alone will in all probability pay for the expense of making the four additional lines from Stratford. In connection with the new lines the directors have also decided greatly to enlarge the Liverpool Street station, on the ground that, spacious as it is, its present area is not large enough for the traffic which daily comes into it at the present time. The cost of the enlargement of the station with the lines approaching it is estimated at 1,000,000*l*. The extension of the station has already been commenced by the erection of new offices and other buildings at the suburban portion.

**Waterloo Bridge.**—Considerable progress has been made towards strengthening the foundations of Waterloo Bridge. The structure was purchased for 475,000*l*. by the Metropolitan Board of Works, under the Toll Bridges Act of 1877, which required the above-named authority to abolish the tolls on the bridges over the Thames within the Metropolis, and thereafter to maintain and repair these communications. Waterloo Bridge was accordingly opened free to the public in 1878. About that time it was discovered that the buttresses had been injured and undermined by the "scour" or wash of the tide. In 1881 certain experimental works were authorised with a view to ascertain what would be the best means of deepening and securing the foundations of the bridge in the bed of the Thames. Investigation showed that this could be effected by placing continuous concrete blocks around the piers. The contractor, Mr. William Webster, commenced operations in January of last year, the amount of the contract being 62,705*l*. The repairs in connection with four of the piers are complete, viz., the second, third, fourth, and fifth from the Surrey side. Several pumping and other engines are in daily use,



steam-power being necessary to the expeditious construction of the coffer dams, and in keeping them dry during the process of putting down the concrete.

**Ports and Canals in France.**—A sum of thirty-two and a half millions of francs has been assigned for works in ports and harbours for next year, and a sum of twenty millions of francs to canals. Of the latter, among the most important are the Central Canal, which absorbs of the former amount one and a half millions; the Eastern Canal, which takes a little more; the canal to connect the Marne and the Rhine, which takes 890,000; while that connecting the Marne and the Saone takes 4,000,000; the canal between Mons and Paris, 800,000; and that between the Rhône and the Rhine, 330,000. The ports undergoing extensive and costly improvements are for the most part those of the north and west—namely, Dunkirk, Calais, Boulogne, Dieppe, Havre, Cherbourg, Nantes, La Rochelle, Bordeaux, &c.

## ART WORKMANSHIP.

**Stained Glass, London.**—Messrs. Charles Evans & Co. have executed some elaborate painted glass and pictorial tile work for the Albert Victor, Burnham Street, Canning Town. In the entrance lobby is a large tile picture 10 feet 5 inches by 10 feet 5 inches, the subject being *The Execution of Anne Boleyn*, selected as Anne Boleyn's castle is in the immediate neighbourhood. The dado is in raised tiles, with painted panels introduced. The walls of the alley way or entrance to the various bars are also panelled in ornamental tiling. In the front over the window are introduced stained-glass panels, in which are portraits of Henry VIII. and Anne Boleyn, surrounded by Renaissance ornament. With the exception of the plate-glass in front, the whole of the glass is either painted or lead lights. The same firm also supplied the ornamental tiles for alley way and the lead lights.

**Stained Glass, Chalfont.**—The large east window of St. Peter's Church, Chalfont, has just been filled with finely-painted stained glass, the gift of Mr. and Mrs. Hibbert, of Chalfont Park, to commemorate their golden wedding day, August 6, 1883. It is a five-light window of the Decorated period of architecture, and the three central openings are occupied with a representation of our Lord's Ascension, with groups of attending angels, and the two angels appearing to the disciples, who occupy the whole of the foreground of the picture. The left-hand opening has the Adoration of the Shepherds in a medallion-shaped panel, and the general groundwork is a rich grisaille pattern; the right-hand opening has a similar medallion, with the Charge to St. Peter. The large openings of the tracery are filled with angels on coloured grounds, and the smaller ones with sacred emblems. At the base of the window is inscribed "J. N. H. & J. A. H., 1883. Married 1833." The work, which is greatly admired, was executed by Messrs. Ward & Hughes, of Soho, London, who have previously executed windows in the same church for the Hibbert family.

## GENERAL.

**The Tinworth Exhibition** of Scenes from Bible History, at the Conduit Street Galleries, will remain open until the 22nd inst., when the Galleries will be required by the 19th Century Art Society, whose inaugural exhibition will open to the public on November 5.

**Mr. A. G. Grubb** has been appointed head master of the new Art School in Blackburn. There were a great many candidates for the appointment. Mr. Grubb was formerly a pupil of the Dundee school, and latterly was an assistant master in Manchester.

**The Loan Exhibition** of Old Masters at Edinburgh will close on the 29th inst.

**A Mural Monument**, of Gothic design, by Mr. J. Forsyth, has just been placed in the chancel of Swinstead Church, Lincolnshire, in memory of the Baroness Willoughby de Eresby.

**Mr. W. Henman, A.R.I.B.A.**, of Birmingham, on Wednesday read a paper at the conference of the Library Association at Liverpool, on the arrangements and fittings of free library buildings.

**Miss Lockwood**, second daughter of Mr. Lockwood, architect, Chester, was unfortunately drowned near Chester on Tuesday by the upsetting of a boat.

**The Manchester Technical School** is to be formally opened on the 27th inst., when Mr. Bernhard Samuelson, M.P., chairman of the Royal Commission on Technical Education, will deliver an address and distribute the prizes to the successful students of the past session.

**The Inverkeithing Town Council** have resolved to raise an action against the contractors for the Forth Bridge, to compel payment of customs dues on material landed at North Queensferry for the bridge works.

**Peterborough Cathedral.**—The demolition of the eastern piers of the lantern tower of the cathedral has revealed the cause of the failure of the supports. The foundations had been erected on a layer of sand, the solid rock being about two feet lower down. The foundation of the new lantern tower will be laid on the rock.

**A Town Hall** at Cellardyke, N.B., the gift to the town of Mr. S. Williamson, M.P., and the late Mr. David Fowler, both natives of the burgh, has just been completed at a cost of 3,500*l*. The formal opening is to take place on the 19th inst.

**The Leeds and Yorkshire Architectural Society** made an excursion to York on Saturday, when visits were paid to the St. Mary's Abbey, museum, and gardens, over which they were conducted by the Rev. Canon Raine, who described the architectural and historical characteristics of the once fine abbey church, &c. The Blind School, formerly a manor house, and for a brief period the royal residence of Henry VIII., was also visited.

**The Sanitary Institute** will hold its congress at Glasgow, commencing on the 25th inst. A meeting of the engineering and architectural section will take place on the 27th, and Dr. Richardson has promised an address for the occasion.

**Mr. Smith, of Aberdeen**, has prepared plans for an extension of the Aberdeen Royal Infirmary, providing from forty to fifty additional beds at an estimated cost of 7,500*l*.

**At a Recent Meeting** of the Skelton Local Board it was reported that 120 houses were uninhabited at Boosbeck, where the late subsidences have occurred.

**An Industrial and Art Exhibition** is to be held at Aberdeen in July next year.

**An Anvil Block** for the new works of the North-Eastern Marine Engineering Company, at Wallsend, has just been cast at the North-Eastern Foundry, South Shields. The weight is 36 tons, and it is said to be the largest casting ever made on Tyne-side. The melting of the metal occupied five hours, and it was poured into the mould by three ladles, one containing 15 tons, another 11 tons, and the third 10 tons. The casting was highly successful.

**The Brighton Town Council** have decided upon spending 10,000*l*. in erecting two concrete piers between East Street and Old Steine to supplement the sea defences already in existence at that point. The new piers will be protected by parapet walls and furnished with seats.

**A Stained Glass Window Society** is proposed to be formed for Hungerford parish church, on a plan similar to that which has been successful at Newbury. The aim of the society would be to enrol a sufficient number of members making the small annual payment of 5*s*. to allow of one window being added to the church every two years.

**Building By-Laws.**—William Hunt, of Old Windsor, having been summoned by the Windsor Rural Sanitary Authority for a breach of building by-laws, in having erected a pair of villas the party walls of which were of concrete, and were not of the prescribed thickness, has been fined 5*l*.

**The Finishing Stone** of the new town hall at Vienna, of which the architect is Herr Friedrich Schmidt, was laid on Wednesday. The building covers an area of 1,870 square metres, and has a frontage of 152 metres in the Ringstrasse.

**The Talargoch Lead Mine** was sold on Wednesday for 4,600*l*. It has always been considered the richest mine in Wales, and up to the present there seems to have been but little diminution in its yield. The mine, machinery, and plant were put up in one lot. There were ten miles of tramway connecting the mine with the London and North-Western Railway, and the machinery cost 50,000*l*.

**University College, Bristol.**—The success of the engineering department at this institution hitherto has been most encouraging, and special arrangements have lately been made for the systematic use of the engineering workshops. Not satisfied with past progress the Council have now provided several facilities for the study of architectural drawing, and special arrangements for the practical work of students in this department have been made with various engineers, surveyors, and architects in and near Bristol. The Medical School, possessing such splendid opportunities for clinical practice in the Royal Infirmary and General Hospital, is rapidly growing, and already the necessity for further accommodation has become apparent. Want of funds seems to be the only check to the fuller growth and increased prosperity of the college. We believe, however, that the citizens of Bristol will not allow an important institution which is doing so much good work to feel the need of liberal support.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, SEPTEMBER 15, 1883.

### TENDERS, ETC.

*As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

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*To prevent the possibility of delay, and to enable the Post Office Order to be the more readily traced in the event of its miscarriage in transit, it is advisable in all cases to notify per following mail, the number, date, and location of the order.*

### APPOINTMENTS VACANT.

STEYNING.—Sept. 18.—Applications are required by the Rural Sanitary Authority for the Appointment of a Surveyor. Salary 120l. per annum. Mr. E. Cripps, Clerk, Board Room, New Shoreham.

### COMPETITIONS OPEN.

BIRKENHEAD.—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 10 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

BRISBANE.—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

NORTHAMPTON.—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

OLDHAM.—Oct. 1.—Plans for Schools for the Union, to Accommodate 120 Boys, 120 Girls, and 60 Infants. The building to be a separate one, in an enclosed area, to contain three schoolrooms, dormitories, baths, kitchen, with cooking arrangements; dining-hall to hold 500 persons, to be arranged so as to be usable for religious service; and four sitting-rooms and four bedrooms for officers. Mr. J. W. Mellor, Oldham, Clerk to the Board.

### CONTRACTS OPEN.

BACKWORTH.—Sept. 19.—For Additions and Improvements to Passenger Station. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

BALDON.—Sept. 17.—For Building a Block of three Dwelling-houses. Mr. Charles E. Marsden, Architect, 3 John Street, Bradford.

BANBURY.—For Works to Town Hall Staircase. Mr. W. E. Mills, Architect, 13 High Street, Banbury.

BANGOR.—Sept. 27.—For Works for Carrying-out the Craigydun Sewerage Scheme. Mr. John Gill, Engineer, Bangor.

BELFAST.—Sept. 25.—For Building Shops and Dwelling-houses in Main and West Streets. Mr. John Boyd, Architect, 9 Donegal Square West, Belfast.

BISHOP AUCKLAND.—Sept. 17.—For Supplying and Laying 150 yards of 9-inch Sanitary Pipes at Summerside. Mr. Robson, Surveyor, Bishop Auckland.

BRIGHTON.—Sept. 28.—For Extending the existing Groyne and Storm Water Outfall opposite the Old Steine and Constructing Promenades over. Mr. Philip C. Lockwood, Borough Surveyor, Town Hall, Brighton.

BUENOS AYRES (BRAZIL).—Sept. 17.—For the Manufacture and Delivery of 1,400 Tons of Wrought and Cast-iron Work, consisting principally of Floor Plates, Man-hole Frames and Covers, Cast and Wrought-iron Roofs, Wrought-iron Door and Window Frames, Ladders, Girders, Rolled Joists, Street and Kerb Gratings, and Outlet Traps. Mr. J. F. La Trobe Bateman, 16 Great George Street, Westminster.

BURNLEY.—Sept. 15.—For Building Business Premises, Bank Parade. Messrs. Waddington & Son, Architects, 5 Grimshaw Street, Burnley.

BUXTON.—Sept. 15.—For Building Workshop, Stabling, &c., at Sterndale Moor. Mr. J. Briggs, Beard Villa, Fairfield, Buxton.

CAIRNFIELD.—Sept. 15.—For Additions to Stables. Messrs. A. & W. Reid, Architects, Elgin.

CHATTERBRIDGE (CHESHIRE).—Sept. 17.—For a Wrought-iron rivetted Tank, to hold 16,000 gallons, to be Erected on a new Water-tower at the Workhouse. Mr. Alf. Culshaw, Architect, Rumford Court, Liverpool.

CHELMSFORD.—Sept. 21.—For Alterations and Additions to Writtle Park. Mr. George Sherrin, Architect, Crane Court, Chelmsford.

DEVON.—Sept. 15.—For Extensions to the College at Shobhear. Mr. James Crocker, Architect, Exeter.

DROGHEDA.—Sept. 15.—For Works at St. Mary's Church. Mr. J. F. Fuller, Architect, Brunswick Chambers, Dublin.

FARNHAM.—Sept. 17.—For Sewerage of Yorktown and Camberley. Mr. James Lemon, C.E., Southampton.

FELINSTOWE.—Sept. 20.—For Building three Houses. Mr. William Eade, Architect, Post Office Chambers, Ipswich.

GLASGOW.—Sept. 20.—For Erection of Laundry and other Buildings. Mr. J. Russell Mackenzie, Architect, 91 Union Street, Aberdeen.

GRANTOWN.—Sept. 15.—For Building a House. Messrs. A. & W. Reid, Architects, Elgin.

GUERNSEY.—Sept. 15.—For Erection of a Terrace of eight Houses, for the Real Property Trust. Mr. J. C. Morde, Secretary, Guernsey.

GUILDFORD.—Sept. 18.—For Alterations in Sanitary Appliances at the Hospital. Mr. W. G. Lower, Architect, 106 High Street, Guildford.

GUILTCROSS.—Sept. 29.—For Rebuilding Wing and Alterations to Workhouse at Kenninghall. Mr. Edward Boardman, Architect, Queen Street, Norwich.

HALIFAX.—Sept. 22.—For Building Six Shops and Houses, and Three Dwelling-houses, Haley Hill. Messrs. George Buckley & Sons, Architects, Waterhouse Street, Halifax.

HUDDERSFIELD.—Sept. 27.—For the Construction of a Tunnel and Works in Connection, and Erection of a Goods Warehouse. Drawings and Specifications at the Engineer's Office, Euston Station.

HUDSWELL.—Sept. 17.—For Erection of Farm Buildings. Mr. James March, Surveyor, Richmond.

HULL.—Sept. 19.—For Construction of Passenger Station at Southcoates. Mr. Wm. Bell, Architect, York.

HULL.—Sept. 20.—For Supply of 1,700 tons of Main-piping. Mr. D. Maxwell, Engineer, Town Hall, Hull.

JARROW.—For Alterations and Improvements to Wesleyan Chapel. Mr. Hugh Shields, Suffolk Street, Jarrow.

KARACHI.—Oct. 28.—For Supply of Cast-iron Pipes, Valves, Hydrants, &c., for Extension of the Karachi Waterworks. Messrs. F. P. Baker & Co, 6 Bond Court, Walbrook.

KENDAL.—Sept. 19.—For Rebuilding Park. Mr. Stephen Shaw, Architect, Kendal.

KIDDERMINSTER.—Sept. 18.—For Building Post Office. H. M. Office of Works, Whitehall.

KITTYBREWSTER.—Sept. 20.—For Building a Slaughtert-house. Messrs. Jenkins & Marr, C.E., 18 Bridge Street, Aberdeen.

MACHEN.—Sept. 15.—For Additions and Alterations to Wain Fawe Schools, near Risca. Mr. E. A. Lansdowne, 26 High Street, Newport, Mon.

MANNINGHAM.—Sept. 20.—For Building Residence, Victor Road. Mr. James Ledingham, Architect, 1 New Ivegate, Bradford.

MIDDLESBROUGH.—Oct. 6.—For the Construction of a Reservoir to hold about 500,000 gallons, with the necessary Pipe Connections, Valves, Overflows, Washouts, &c. Mr. J. Mansergh, C.E., 3 Westminster Chambers, Victoria Street, S.W.

MIDLAND RAILWAY.—Sept. 20.—For Building Coal Offices, &c., at West Kensington and Child's Hill, and Waggon Shop at Kettering. Drawings, &c., at the Clerk of Works Office, 109 St. Pancras Old Road, N.W.

MIDLAND RAILWAY.—Sept. 20.—For Supply and Delivery of Ironwork for a Footbridge near Saffron Lane, Leicester, and for a Footbridge and Subway at Oatville. Plans and Specifications at the Engineer's Office, Derby.

MIDLAND RAILWAY.—Sept. 20.—For Supply and Erection of Ironwork in Construction of Subway at Healey Station. Plans, &c., at the Engineer's Office, Derby.

MONKWEARMOUTH.—Sept. 19.—For Building Stables for 107 Horses, with Loose Boxes, Shoeing-shed, Harness-Room, &c., and Two Horse-keepers' Houses. Mr. William Bell, Architect Central Station, Newcastle-on-Tyne.

NEWHAVEN, SUSSEX.—Sept. 17.—For Erection of two Chapels, Keeper's Lodge, Mortuary Enclosing Walls, Construction of Roads, and Completion of Cemetery. Mr. Alfred R. O. Lowndes, Clerk to the Board.

NORTHUMBERLAND.—Sept. 15.—For Building Cottages and other Works on the Callaly Estate. Mr. R. J. Johnson, Architect, 3 Arcade, Newcastle-on-Tyne.



**NORTHWICH.**—Sept. 20.—For Construction of Works of Water Supply for the Township of Acton. Mr. H. J. Bennett, Surveyor, Northwich.

**NOTTINGHAM.**—For Building a Warehouse. Mr. J. Bindon Carter, Architect, 43 Park Row, Nottingham.

**ORMSKIRK.**—Sept. 19.—For Additions and Alterations at the Workhouse. Mr. Thomas Kissack, Architect, Derby Street, Ormskirk.

**OXFORD.**—Sept. 24.—For Construction of Iron Roof, Columns and Girders, and for Cast-iron Socket Pipes and Special Pipe Castings, &c. Messrs. T. & C. Hawks'ey, 30 Great George Street, Westminster, S.W.

**PONTARDAWE.**—Sept. 25.—For Building Board School. Mr. D. Bevan Turberville, Solicitor, 4 Herbert Street, Pontardawe.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**RADCLIFFE.**—Sept. 19.—For Tile Sewers in Irwell Street. Mr. J. Sharples, Clerk to the Local Board, Radcliffe.

**ROCHDALE.**—For Alterations to Shop Premises. Mr. John Stott, Architect, Akroyd Chambers, Rochdale.

**SHEFFIELD.**—Sept. 19.—For Building Shops, Offices, &c., in West Street. Messrs. Wightman & Wightman, Architects, High Street, Sheffield.

**SHEFFIELD.**—Sept. 29.—For Construction of Arches, Culverts, Retaining Walls, and Works for Road, Crooke's Moor Valley. Mr. R. Davidson, Borough Surveyor, Sheffield.

**STAFFORD.**—Sept. 24.—For Restoration of Tower and Building Transepts, St. Chad's Church. Mr. Robert Griffiths, Architect, Stafford.

**STAVERTON.**—Sept. 25.—For Repairs, &c., to New Inn. Messrs. John Ingman & Sons, Architects, Hazelwood Road, Northampton.

**ST. ALBANS.**—Sept. 18.—For Cleaning and Repairing Corn Exchange. The City Surveyor, St. Albans.

**SWANSEA.**—Sept. 18.—For Haulage and Laying of Four Miles and a Half of 24-inch Cast-iron Socket Pipes. Mr. Ralph Henry Wyrill, Borough Engineer, Swansea.

**TALLANTIRE.**—Sept. 22.—For Works of Water Supply. Mr. John Musgrave, Court House Buildings, Cocker mouth.

**TORQUAY.**—Sept. 29.—For Erection of Mansion, Stables, and Cottage at Shipway. Mr. E. H. Harbottle, Architect, Exeter.

**WASHINGTON.**—Sept. 19.—For Building Eleven Dwelling-houses. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

**WEST BROMWICH.**—Sept. 20.—For Erection of Laundry Buildings at the Workhouse. Mr. W. Henman, Architect, 38 Bennett's Hill, Birmingham.

**YEADON.**—Sept. 15.—For Building Residence. Mr. George Foggitt, Architect, Yeadon.

## TENDERS.

### ANDOVER.

For Alterations to the Corn Exchange, Andover.

Annetts	£155 0 0
Beale	153 0 0
EYLE (accepted)	150 18 0
Surveyor's estimate	148 0 0

### ASHBY-DE-LA-ZOUCH.

For Construction of Waterworks, Woodville, for the Ashby-de-la-Zouch Rural and Ashby Wolds Sanitary Authorities. Messrs. THOMPSON & ABBOTT, Engineers.

#### Pipes and Fittings.

Warren, Stacey & Co.	£818 14 6
Firmaston Bros.	799 19 6
Newton, Chambers & Co.	770 14 6
Staveley Coal and Iron Co.	760 11 6
Stanton Iron Co.	733 19 0
Butterley Iron Co.	711 5 6
CLAY CROSS IRON CO. (accepted)	674 14 8

#### Excavating and Laying Pipes.

Cropper	410 0 2
Harvey	374 8 2
J. & G. Tomlinson	370 5 4
Hilton & Sons	325 13 4
Baker & Sons	310 0 0
Fort, Buckle & Co.	282 19 8
Crump & Sons	278 9 8
Warren, Stacey & Co.	273 19 2
Gild	255 7 10
Turton, Derby	222 19 5

### BARNARD CASTLE.

For Erection of the North-Eastern County School, Barnard Castle. Mr. JOHNSON, Architect.

KYLE, Newcastle-on-Tyne (accepted). £15,448 0 0

### BARNET.

For Three Pairs of Semi-detached Villa Residences on the Park Road Estate, High Barnet. Mr. H. H. BRIDGMAN, Architect.

REID (accepted).

### BECKENHAM.

For the Erection of Fire-engine Stables, Beckenham.	
Lay, Bromley	£1,700 0 0
Staines & Son, Great Eastern Street	1,688 0 0
Hack, Poplar	1,665 0 0
J. & C. Bowyer, Upper Norwood	1,626 0 0
Hollingsworth, Penge	1,600 0 0
Stafford, Old Kent Road	1,524 0 0
Jones, Beckenham	1,517 0 0
Wootton, Penge	1,432 0 0
Blackford, Norwood Junction	1,359 0 0
Marshall, Brighton	1,350 0 0
T. D. & A. Pound, Camberwell Green	1,299 0 0
Surveyor's estimate	1,200 0 0

For Eden Road Improvements, Beckenham.

Woodham & Fry	£538 0 0
Brown	499 0 0
Wootton	458 10 0
Knowle & Robson	476 5 0
Streeter	437 6 3
Palmer	417 0 0
Etheridge, Deptford	394 0 0
Marshall	381 0 0
Mowlem & Co.	371 17 6
Surveyor's estimate	450 0 0

### BEDFORD.

For Construction of a Roadway and Bridge over the River Ouse at Bedford. Contracts No. 1 and No. 2. Mr. J. J. WEBSTER, Engineer.

Contract No. 1.	
PILLING & Co, Manchester (accepted)	£3,657 18 3
Contract No. 2.	
GODDARD & MASSEY, Nottingham (accepted)	£3,150 0 0

### BLACKBURN.

For the Construction of a Road from Hollins Head Mill, Tockholes, to Halliwell Bridge. Mr. JAMES BERTWISTLE, Architect and Surveyor. Quantities by the Architect.

Harris & Jenkins, Great Harwood	£1,475 17 8
Nowell, Tockholes	1,306 3 3
Counsell, Blackburn	1,250 0 0
Orrell & Sons, Darwen	1,198 10 0
Carr, Blackburn	1,194 7 0
Dean, Accrington	1,100 0 0
Leigh, Withnell	1,098 10 0
KNOWLES, Darwen (accepted)	1,088 7 0

### BRIGHTON.

For Restoring and Altering Queen's Square Church, Brighton, principally Stonework. Mr. ARTHUR LOADER, Architect, Brighton.

Parsons	£2,170 0 0
Lockyer	2,170 0 0
Cheesman & Co.	2,150 0 0
Barnes	2,110 0 0
BRUTON (accepted)	1,975 0 0

### BROMLEY.

For Alterations to Local Board Offices, Bromley.

Bulleid	£917 0 0
Priestly	875 0 0
Payne	864 0 0
Grubb	856 0 0
Jones	839 0 0
Crossley	825 0 0
LAY (accepted)	687 0 0

### CARDIFF.

For Erecting a Shop and Premises at Penarth, Cardiff, for Mr. J. Slade. Mr. W. F. GILLET, Architect, Cardiff and Newport. Quantities not supplied.

Thomas, Cardiff	£710 0 0
Thorne, Penarth	600 0 0
Ford, Penarth	585 10 0
John, Penarth	575 2 8
DRAPEL, Penarth (accepted)	570 0 0

For Rebuilding Shop and Premises, 24 Clifton Street, Cardiff, for Mr. S. Harris. Mr. W. F. GILLET, Architect. Quantities by the Architect.

Symonds	£791 0 0
Chant	707 7 1
Eastbrook	689 3 7
Richardson	677 0 0
COCKS (accepted)	585 0 0
Lewis	570 0 0
Thomas	550 0 0

For Building House and Stabling on the Witla Estate, near Cardiff. Messrs. A. O. WATKINS & SON, Architects. Quantities by the Architects.

Moore & Son, Newport	£2,217 0 0
Shepton, Cardiff	2,177 0 0
Morris, Newport	2,100 0 0
Welsh, Hereford	2,100 0 0
Bowers, Hereford	1,941 0 0
FORSE, Bristol (accepted)	1,815 0 0

### CHADWELL HEATH.

For Building an Infant School, Chadwell Heath, for the Dagenham School Board. Mr. JOHN HUDSON, 80 Leman Street, Architect. Quantities supplied.

Heath	£1,002 10 0
Martin	1,002 0 0
Hack	999 0 0
Messrs. Cocks	982 0 0
Wood	957 0 0
Drickall	945 0 0
Parrish & Hawker	915 0 0
Barnes	912 0 0
Hawkings	912 0 0
Russell	900 0 0
JOHNSON*	858 0 0
Smith	822 0 0
Warr	822 0 0

\* Accepted subject to the sanction of the Education Department.

### CHIPPING WYCOMBE.

For Additions and Alterations to West End Board School, Chipping Wycombe. Mr. CHARLES CARTER, Architect, Great Marlow.

LOOSEY, High Wycombe (accepted). £370 0 0

### DUKINFIELD.

For the Forming, Paving, &c., Park Road.	Mr. WILLIAM SPINKS, Surveyor, Dukinfield.
Hayes, Bolton	£3,595 3 0
Heaton, Warrington	3,400 0 0
Clarke, Hulme	3,394 10 4
Burton & Sons, Ashton-under-Lyne	3,200 16 6
WORTHINGTON, Manchester (accepted)	3,068 9 8

### DURHAM.

For Erection of Infant School in Gilesgate, Durham. Mr. C. HODGSON FOWLER, Architect.

Lowes	£2,212 18 0
Craig	1,888 0 0
Rutters	1,811 10 0
Caldcleugh	1,710 0 0
Wardropper	1,600 0 0
SANDERSON (accepted)	1,470 0 0

### GRAVESEND.

For the Erection of a Group of three Cottages in Pelham Road, Gravesend, for Mr. Henry Smith. Messrs. WADMORE & BAKER, Architects. Quantities supplied.

Black, Barking	£2,517 15 8
Blake, Gravesend	2,360 0 0
Cobham, Gravesend	2,252 0 0
Archer, Gravesend	2,240 0 0
MARTIN, Gravesend (accepted)	1,900 0 0

### LONDON.

For Extensions at Holly Lodge, Highgate, for the Right Hon. the Baroness Burdett-Coutts. Mr. H. H. BRIDGMAN, Architect.

WHEELER & SONS (accepted).

For new Stables at Holly Lodge, Highgate, for Mr. W. Burdett-Coutts. Mr. H. H. BRIDGMAN, Architect.

WHEELER & SONS (accepted).

For further Extensions to Café Restaurant, 49½ Strand, for Messrs. Giamella. Mr. H. H. BRIDGMAN, Architect.

THOMAS (accepted).

For Fitting-up Confectionery Shop in the Finchley Road, Hampstead, for Mr. J. Findlay. Mr. H. H. BRIDGMAN, Architect.

SAGE (accepted). £600 0 0

For Alterations and Additions at 109 London Wall, for Mr. Wm. Pope.

RICHARDSON (accepted). £730 0 0

For Three Pairs Semi-detached Villas at Arlington Park Gardens South, Turnham Green. Mr. H. H. BRIDGMAN, Architect.

BAREHAM, builder (accepted).

For a Terrace of Houses at Arlington Park Gardens North, Turnham Green, for Mr. J. T. Bailey. Mr. H. H. BRIDGMAN, Architect.

BAREHAM, builder (accepted).

For the Lecture Hall of East Dulwich Presbyterian Church. Mr. J. M. BEXDON, Architect, 5 Cambridge Place, N.W.

Elliott	£1,060 0 0
Robb	1,045 0 0
SMITH, Camberwell (accepted)	945 0 0

For the Erection of Block L on the Bridgehouse Estate, Brockley. Mr. W. CHAS. EVANS, Architect, 3A Poets' Corner, Westminster Abbey.

GREGORY, Clapham (accepted). £2,720 0 0

### NEWPORT.

For Villa on the Stowe Park Estate, Newport, Mon. Messrs. A. O. WATKINS & SON, Architects. Quantities by the Architects.

Linton, Newport	£1,531 0 0
Moore & Son, Newport	1,456 0 0
Moulton & Brownson, Newport	1,405 0 0
Prosser, Newport	1,400 0 0
Morris, Newport	1,364 0 0
Martin, Newport	1,358 0 0
Jenkins, Newport	1,325 0 0
Welsh, Hereford	1,294 0 0
Miles, Newport	1,212 0 0
FORSE, Bristol (accepted)	1,175 0 0
Bowers, Hereford	1,124 0 0

For Completing the Partially-erected Houses at Woodland Park, Maindee, Newport, Monmouth, for Mr. W. M. Jones. Mr. W. F. GILLET, Architect, Cardiff and Newport.

Brind, Newport	£1,790 0 0
Morgan, Newport	1,350 0 0
Martin, Newport	1,300 0 0
Clarke, Cardiff	1,250 0 0
Harvey, Newport	1,225 0 0
RICHARDSON, Cardiff (accepted)	1,175 0 0
Richards, Bristol	1,130 0 0

### NEWTON.

For Methodist New Connexion Chapel and Schools, near Hyde. Mr. J. H. BURTON, Architect, Warrington Street, Ashton-under-Lyne.

Green, Hyde	£1,940 0 0
Cordingley & Stopford, Manchester	1,886 0 0
Haughton, Godley	1,830 0 0
Pike, Hooley Hill	1,747 0 0
Neal, Ashton-under-Lyne	1,740 0 0
Smith, Fairfield	1,730 0 0
Butters & Carson, Manchester	1,650 0 0
Williamson, Ashton-under-Lyne	1,650 0 0
Gibson, Dukinfield*	1,620 0 0
Robinson, Hyde*	1,620 0 0
Holmes & Webster, Ashton-under-Lyne*	1,595 0 0
DAVISON, Manchester (accepted)*	1,593 0 0

\* Tender amended, subject to several small deductions.

### OSWESTRY.

For Carrying-out the Crumpwell Drainage, Oswestry.

O. Harris, Shrewsbury	£135 0 0
J. Harris, Oswestry	130 5 0
W. & G. Thomas, Oswestry	129 10 0
PRYCE, Oswestry (accepted)	100 0 0



PONTYPOOL.

For Building Chapel at Pontypool. Messrs. A. O. WATKINS & SON, Architects. Quantities not supplied.		
Linton, Newport	£1,420	0 0
Moulton & Brownscombe, Newport	1,350	0 0
Prosser, Newport	1,250	0 0
Parfitt, Cwmbran	1,150	0 0
Vaughan, Trelegar	1,085	0 0

RAMSGATE.

For Alterations and Additions to Stoke House, Ramsgate. Mr. ALFRED R. PITE, Architect.		
Duckett	£620	0 0
Forwalk	584	0 0
Martin	538	0 0

RIPLEY.

For Building Schools for the Ripley School Board at Waingroves and Hartshay.		
Warren, Derby	£1,516	0 0
Manners, Ilkeston	1,500	0 0
Fletcher, Ripley	1,446	0 0
Clower, Ripley	1,419	0 0
Askew, Matlock	1,380	7 7
Walker, Wirksworth	1,370	0 0
Glossop, Ambergate	1,349	0 0
Welton, Ripley	1,317	10 0
Clarke, Ripley	1,260	0 0
FROST & SON, Basford (accepted)	1,181	7 2

RAVENSTONE.

For Repairs, Additions to, and Reseating Ravenstone Church, Derby. Mr. WILLIAM C. STREET, A.R.I.B.A., Westminster Chambers, Architect.		
Clarson & Sons, Tamworth	£1,367	6 0
Mills, Ashby-de-la-Zouch	1,363	2 6
Stamford, Ashby-de-la-Zouch	1,297	10 0
Yates, Shiffnall	1,205	0 0
Lynex, Walsall	1,121	3 0
BLAND, Leicester (accepted)	1,049	0 0

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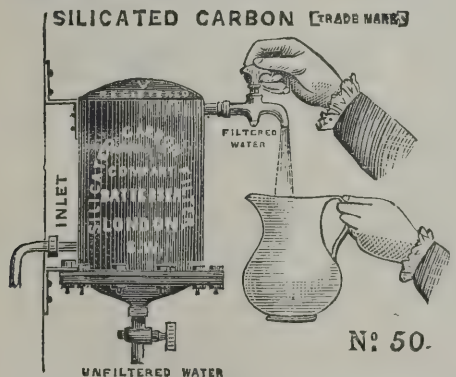
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For Erection of House, Shop, and Premises, All Saints' Street, Stamford. Messrs. RICHARDSON, Architects, Stamford.		
Halliday, Stamford	£996	0 0
Martin, Warrington	945	0 0
J. Woolston, Stamford	921	0 0
Hilliam & Corby, Stamford	884	0 0
Lyon & Co., Stamford	811	0 0
T. Woolston, Stamford	800	0 0
Rouse, Clarke & Scholes, Stamford	750	0 0

STOKENCHURCH.

For Additions and Alterations to the Stokenchurch (Oxon) Infant Board School. Mr. A VERNON, J.P., Architect, High Wycombe.		
SYRED (accepted)	£210	0 0

TOTTENHAM.

For the Construction of Two Sewage-depositing Tanks in Concrete, Sewage Works, Page Green, Tottenham. Mr. DE PAPE, Surveyor.		
Lister, Poplar	£6,669	0 0
Botterill, Cannon Street	4,193	0 0
Cooke & Co., Battersea	3,243	0 0
Marshall, Brighton	3,200	0 0
Bell, Wood Green	3,195	0 0
Cowdery & Son	3,020	0 0
Bloomfield, Tottenham	2,950	0 0
Slander, Harlesden	2,800	0 0
Kay, Skegness	2,718	5 9
Gibbons, Ipswich	2,650	0 0
Humphreys & Son, Tottenham	2,500	0 0
Vernon, Ewens & Co., Westminster	2,500	0 0
FAWKES, St. Pancras (accepted)	2,379	0 0

WEST COWES.

For Construction of Sewer in Newport Road, West Cowes, Isle of Wight.		
Gates	£205	10 0
MEADER, Jun. (accepted)	189	10 0
Coker	137	10 0

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Cakes, Kearsley	£667	17 0
Willan, Chatham	516	3 4
Holt, Miles Platting	512	3 0
Randall, Weaste	493	17 7
Worthington, Rusholme	487	4 8
Bird, Chorlton	470	0 0
Naylor, Hulme	437	11 1
Unsworth, Moss Side	432	5 0
LOMAX, Eccles (accepted)	364	19 5
Engineer's estimate	421	0 0

WELLINGBOROUGH.

For Building School, Northampton Road, Wellingborough. Mr. EDWARD SHARMAN, Architect. Quantities by the Architect.		
Underwood	£500	0 0
Henson	500	0 0
Mariott	498	0 0
Brown	489	0 0
Morris	485	12 0
Harrison & Hacksley	469	0 0
LEETE (accepted)	468	0 0

WELLINGTON.

For Building Hadley Schools, Wellington, Salop.		
Lavender	£1,551	1 8
Higley	1,527	0 0
Lucas	1,492	18 10
Treasure & Son	1,421	0 0
Bullock	1,410	0 0
Whitome	1,337	0 0
R. & J. Millington	1,350	0 0
BLAKEMORE (accepted)	1,189	0 0

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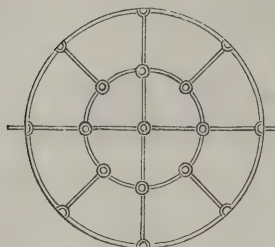
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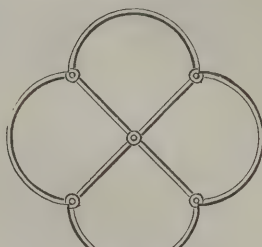
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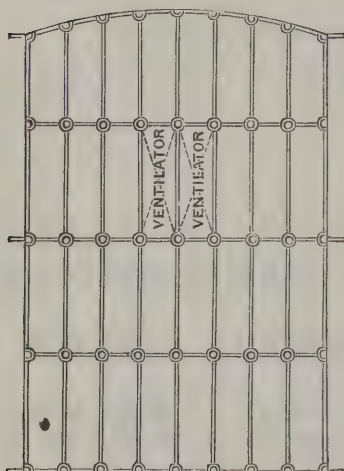
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The Patentee begs to call particular attention to the great strength of this construction. The Bars and Bosses, being of malleable wrought iron, form an exceedingly firm joint at the intersection of bars. They are durable, and of light appearance, the Bosses being small and not unsightly. They can be made at very short notice, and at the price of an ordinary cast iron sash.

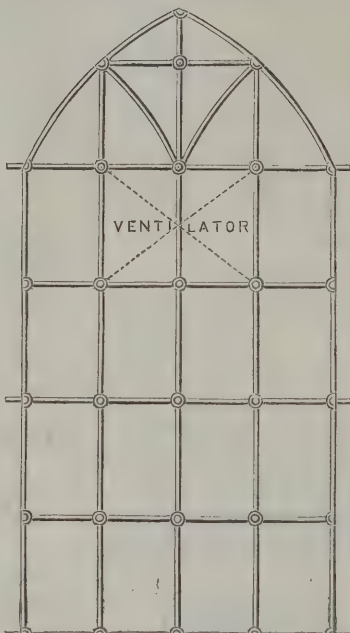
PRICES UPON APPLICATION.



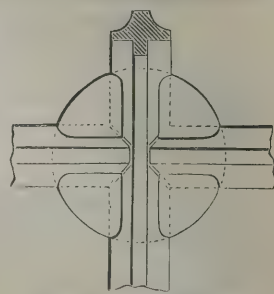
CABLE LIGHT.



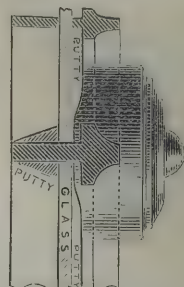
CLOSE BAR SASH (obviating use of Window Guards.)



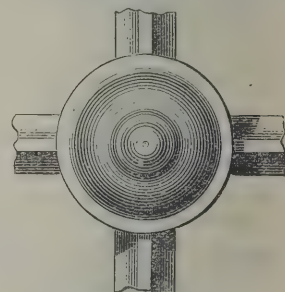
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Back view of Boss, full size.



Section through Boss, full size.  
These can be glazed flat, like ordinary wooden sashes, without the corners of the panes being chipped off.



Front view of Boss, full size.  
Obscuring no appreciable light.

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# The Architect.

## HOUSE-HUNTING.



THE trials and perplexities of the man, or woman, who is engaged in the selection of a new abode, have many a time and in many a form been made the subject of description grave or gay; and we observe just now in the daily press an animated correspondence which is being kept up—the subject being no doubt a very useful and appropriate one for holiday time—with more than usual vigour, as if for the purpose of showing that such trials and perplexities are vastly greater in our day than they have ever been before. If they are so, the reason is twofold. It is not that the houses of our towns are worse than they used to be; for indeed, comparing old with old and new with new, they are much better: but what may be called the just demands of those who represent the age, in this as in many other respects, are no doubt considerably advancing, while, at the same time, it is equally plain that the personal fastidiousness of some who do and some who do not represent the age is becoming so very much artificialised and exaggerated as to be difficult to meet. The leading question with which the troubled mind of the house-hunter is now to vex itself is of course the smell of drains; but urgent attention is at the same time not to be denied, according to the new doctrine of house-hunting, to various other important points—aspect and prospect, for instance, party walls and neighbours, and the Queen ANNE style of decoration. In all this, as need scarcely be said, there is a good deal that is more or less new, and a good deal that is more or less true; but if upon investigation it should appear to the bewildered house-hunter that most of what is new is scarcely true, and most of what is true is scarcely new, he may console himself at any rate with the trite reflection that such is the way of a great many other things in social science besides house-hunting.

We are happy to find that the old panacea for all the ills that houses are heir to seems to have dropped out of notice, namely, the conviction and execution of an architect for murder. The various lines of argument which, in former discussions of the same subject in the newspapers, used to converge upon this proposition do not now appear. On the contrary, it is the architect—or surveyor as he is called in this connection—who is to be called in for the conviction and execution of somebody else, generally the builder or the landlord. We are speaking seriously. Knowing a little of the ways of "Crown's quest law," we feel compelled to say gravely that, a few years ago, if a jury could by any means short of too palpable idiocy have delivered over to the late Mr. MARWOOD a real architect, thousands of excellent people would have experienced a melancholy satisfaction, hoping that this would prove to be at any rate a step, however painful, in the direction of house reform. On the same ground, what we now see is the likelihood of a verdict being announced one of these days, to the effect that some enterprising speculative builder whose bricklayer has failed to make his drains airtight, or some dull house proprietor who has failed to appreciate the consequent smells, has thereby rendered himself liable for the sacrifice of innocent life, for which it might be good policy to pronounce him guilty of something closely resembling culpable homicide. At any rate we are glad to see that the poor architect is at length out of danger, and thus to be able to feel that by his means the public indignation in respect of ill-built houses may be now in some degree kept on the right track, and perhaps restrained also within reasonable limits. For we have plainly to say that, amidst the babel of modern sanitarian tongues, it is his alone that may safely be listened to; the experienced architect is the only qualified doctor of houses, and the more the matter is discussed the more will this become manifest.

The peculiar circumstances of house occupation in and around London are such as to make house-hunting here a much more complex business than it is anywhere else. We

have to remember that a population exceeding that of the whole kingdom of Scotland, and every day increasing, is densely massed within a circle a very few miles in diameter; that in the average wealth of even its ordinary classes this population is supreme in the world; and that in an intelligent aptitude to appreciate residential and other material comforts the sense of being at headquarters is dominant throughout the largest possible proportion of the community. To meet this state of things, and especially in view of the constant demand for augmented accommodation, and the restlessness of the people in continually changing their abodes, an enormous trade is carried on without interruption around the whole circumference, in building new houses, under conditions which are (so to speak) facilitated to such an extreme as to be rendered complex to an extreme—what with ground rents, leasehold rents, improved rents, mortgages, public contributions of all kinds, and professional technicalities beyond all comprehension of ordinary minds, over the whole of which, and under the whole, there lies that essential principle of freedom of tenancy, whereby a man has no more personal interest in his home than he has in a box at the theatre, or a seat on the top of an omnibus. In fact, it is this freedom carried to excess which not only has created the practice of house-hunting, but which in and around London has made it the perfectly bewildering and troublous thing so justly complained of. It comes at last to this, that the house-hunter in the suburbs of London is like the pioneer on the American prairie, an explorer without a guide in a perfect wilderness, knowing nothing, trusting nobody, taking every risk as he best can, hoping against hope, and relying at the worst upon his liberty to try again. Leaving out of account the older and more central portions of the town, over which business reigns, the whole vast area around, where residence is the ruling consideration, is a *terra incognita* of this kind, in which house-hunting from time to time has become to many people—we might almost say to most—an adventure of despair.

When the house-hunter is advised to explore with assiduity the drainage of the house he prefers, no one who understands the subject will hesitate to acknowledge that, as a rule, the house drainage of London, both old and new, will take a good deal of exploration. The fact cannot be too persistently urged, or the explanation of it too often reiterated, that one direct consequence of our system of underground sewerage is the continual endeavour of sewer-gas to force its way backward into the houses. In almost every case where extraordinary precautions have not been taken recently, this endeavour is at the present moment more or less successful, and it is best to look the truth fairly in the face that Londoners in general have been actually acclimatised to the inhalation of a moderate quantity of the poison, or they would suffer more from its effects than they do. Now the simple proposition of our sanitary surveyors is that the structural defects which are the cause of this are easily cured—in fact, more easily cured than endured. The advice given to house-hunters on this point therefore, is to call in a surveyor and have the drains examined and reported upon, together with the sinks, closet apparatus, and so on, as matter of course, and the water supply while he is about it. This is good advice. It is further suggested that the landlord should be required to take the legal responsibility of warranting the salubrity of the house; but on this point we confess we are at a loss what to say, except it be that we fear it will be very difficult to get the solicitor of the landlord to see his way to sanction so dangerous a warranty. It might perhaps be fair enough to admit a covenant into ordinary leases whereby the lessor shall keep the drains in a healthy condition so as to satisfy a surveyor, but to allow a lawsuit for damages to be the probable process of arbitrament would be one of the most dangerous conditions that could be attached to house property.

Aspect and prospect are considerations that ought to be much more studied than they are in relation to new houses; indeed, aspect is not studied at all, and prospect, at least rearward prospect, is even ludicrously ignored. That south-east is the most cheerful aspect for all rooms that can have it, is a rule easily remembered. Streets ought to be made to run as nearly as possible north-east and south-west, and then, if on one side of the way the family sitting-rooms be placed towards the front, and on the other side of the way towards the rear, this is perhaps all that can be done in a simple way. Respecting the provision of an agreeable outlook at the back of the house, we need only observe that it is obviously utter folly to



neglect it, and that nevertheless it is almost everywhere neglected absolutely.

Those house-hunters who make a *sine qua non* of Queen ANNE finishings must, we fear, be left to get them if they can; but we cannot advise them to refuse a good house on this ground unless their feelings are really too strong to be subdued. How long the admiration of this somewhat invertebrate if occasionally piquant mode of decoration is to withstand the especial tendency of the admirers of oddity to change their minds, is a question to be particularly asked; and what will be said of it when it is forsaken, or what will then be thought of the houses which have been fashioned in its honour, we are content to leave futurity to reveal.

One thing at any rate is certain, that our houses are improving every day; which may be a consolation to all house-hunters, except perhaps those whose fastidiousness grows with what it feeds upon.

### MECHLIN ART EXHIBITION.

THE ancient city of Mechlin (Flemish, Mechelen; and French, Malines), the ecclesiastical metropolis of Belgium, is situated on the Dyle, a tributary of the Scheldt, about midway between Brussels and Antwerp; and the contrast of the gay animation of the capital with the sober stillness of the archiepiscopal city is very marked. The cathedral of St. Rombold, in the centre of the city, a Gothic edifice of cruciform plan, with radiating chapels, was commenced in the thirteenth century, continued during the fourteenth, and terminated in the fifteenth; but the fine tower remains unfinished. The height intended was 150 mètres (492 feet), but barely two-thirds are attained. The skeleton clock-dials are of iron, gilt, so as not to obstruct the view of the building, and are no less than 15 mètres (nearly 50 feet) in diameter. This immense size is only realised by its reproduction in the pavement surrounding the statue by Tuerlincks to MARGARET of Austria in the Grand' Place, with the figures of the hours, and also the letters of the cardinal points, formed with paving-stones. Looking on to this Place is the old Halle, dating from the year 1340, of severe Gothic style, with projecting turrets. The church of Notre Dame contains the celebrated picture by RUBENS of the *Miraculous Draught of Fishes*; and that of St. JOHN, a triptych on the high altar, also painted by him. Indeed, RUBENS himself was wont to say that, if people would see his best works, they must go to Mechlin.

The staple industry with which Mechlin is chiefly associated in the minds of Englishmen has almost died out; but a spirited attempt is being made by a charitable lady to revive the old glory of Mechlin lace. Another branch of manufacture has, however, now come to the fore; and this is carved oak furniture, which is designed with great taste after ancient models, well executed, and sold at a reasonable rate. This art furniture mainly constitutes the fourth section, "Mechlin industry," of the exhibition in favour of the Free Catholic schools of the city, that was opened by the Bishop of EYTHRÆA, acting for the Archbishop, on August 26. The other sections are: 1, ancient art; 2, the fine arts and sciences; and 3, education; while the fifth class embraces agriculture and horticulture. Unfortunately, the committee have not been able to secure a building of sufficient size to hold all the exhibits, which are, in consequence, spread over four separate localities.

The section of ancient art is divided into twelve classes, of which the first, devoted to sculpture, is very rich. There are two retables, of the sixteenth century, one of painted wood, ornamented with an alabaster alto-relievo representing the scene on Calvary, and the other adorned with silk flowers; while a statue of the Virgin, also in polychrome wood, dates from the fifteenth century. An oak niche, with figures of the Virgin and St. JOHN, is of the thirteenth century; and three key-stones of carved oak were taken from the Goldsmiths' Chapel at Ghent. There is a boxwood crucifix by GAUTHIER POMPE, born at Ath in 1703, who excelled in such work. Another, with cross in shell, is said to have been used by Count FREDERICK DE MÉRODE on the day of his decease. A wood statuette of the *Virgin and Child with St. John the Baptist*, is the work of LUC FAYD'HERBE, born at Mechlin in 1617, who followed the course of lectures given by RUBENS, and became his friend. There is an ivory crucifix by ARNOLD QUELLYN, the younger, who was born at St. Trond in 1625, and became a member of the Guild of St. Luke.

In the second class, goldsmiths' work, must be mentioned a Flemish goblet, called *Molenbeker*, which, when turned upside down, forms the support of a windmill with blow-pipe. When the cup is filled, the person drinking from it is supposed to cause the sails to revolve with the blow-pipe, and to empty the cup before the mill stops. Another goblet, in *repoussé* silver, of the year 1678, bears the escutcheon of the Bakers', Millers', Brewers', Coopers', Carpenters', Slaters', and other guilds, with three figures of satyrs.

The third class is devoted to "Dinanderies," by which is meant brass utensils. They are so called from having been made especially at Dinant, on the Meuse, in the Middle Ages; but they are now produced extensively at Antwerp. An improvement on King ALFRED's candles is shown in a horary lamp of the seventeenth century, in which the hours are marked by the consumption of oil. There is a brass from the church of Notre Dame aux Dominicains at Louvain, recording in a Latin inscription the deaths of JOHANNES RIKE, majister civium, in MCCCLXX; his wife, KATERINA, in MCCCLXXII; and their son, EGIDIUS, canon of St. Peter's, Louvain, in MCCCXCIX. A box for holding weights bears the date 1749, the arms of Mechlin, and the following Flemish inscription:—

Een valsche schael is een grouwel by Godt  
Maer een oprecht ghewicht is syn ghebodt,

while a bell, also with the Mechlin arms, and ORPHEUS charming the animals with his lyre, bears the Latin inscription, "O Mater Dei, memento mei," with the maker's name, "PETRVS GHEINIUS ME FECIT 1574." Some old Roman penates and several objects in bronze found in a tomb at the abbey of St. Ethelberg, Barking, near London, are also included in this class.

The fourth class embraces arms and other objects in wrought or cast iron, and includes a *vuurplaat*, or back-plate for a fireplace, with bas-relief representing the Queen of Sheba's visit to SOLOMON, found in the infirmary of the Mechlin Béguinage, and dating from the sixteenth century. There is an old pair of irons for making gauffres, one of the faces being ornamented with cocks and flowers, while the other is simply lozenged.

Class five, ceramic ware and stained glass, includes several lachrymatory vases. Instead of containing the tears shed at funerals, it is now thought that the lachrymatories were used to hold the scented oil with which the stake was anointed before being kindled, as they are found sometimes in Christian tombs in the Catacombs. A *bollekens kan*—or stone jug—10½ inches high, is contributed by the Baroness VAN DEN BRANDEN DE REETH; and a brown Raeren stoneware pitcher, 8 inches high, found at Neerwinden, dates from 1567. It is ornamented with a double eagle and two lions rampant. M. NUYTJENS has lent three hearth-bricks ornamented with historical subjects, and another with two lions *effrontés*; while the Rev. G. VAN CASTER sends a fourth, ornamented with foliage. A Genoa earthenware dish shows a woman surrounded with children, and bears the legend CAITAS (*sic*). A pane taken from the small Béguinage bears the following Flemish inscription: "O heere doer die vrucht uws duerbaer bloets cracfhicheit soe mogen wy alle sonders verwerpen u ghenadijghe bermerlicheit."—URSEL VAN MOKEN-BORCH.

The first object in class six, furniture, is a knife and fork of the sixteenth century, the handle of the former being ornamented with the history of LOT, ADAM and EVE with the forbidden fruit, the adoration of the Magi and Charity; while the handle of the fork illustrates the story of SUSANNAH and the young TOBIAS on the one side, and the Adoration of the Shepherds, with Hope represented by a woman holding an anchor, on the other. Baron BÉTHUNE contributes a torch, dating from the beginning of the sixteenth century, composed of waxed wicks rolled spirally round a fir rod.

The most noteworthy object in class seven, embracing tapestry, tissues, and lace, is a table-cloth of the seventeenth century, ornamented with subjects from the Book of Numbers—two men carrying a bunch of grapes on a pole, the Israelites bitten by serpents, and MOSES lifting up the brazen serpent. Very interesting to ladies is an album, lent by the Rev. G. VAN CASTER, containing about five hundred patterns of lace of various periods.

Foremost in class eight, drawings, engravings, and pictures, is an old copy of the plan of Mechlin, made in 1564 by the surveyor, J. VAN HANSWYCK, and preserved in the communal



archives. There are also plans of the city in the seventeenth century and in the year 1775, with a section of the cathedral tower. A copperplate, lent by M. G. VAN MELCKEBEKE, drawn by G. HERREYNS, and engraved by the Brothers KLAUBER, of Augsburg, for the jubilee of 1775, represents the arrival of St. ROMBOLD at Mechlin. The same contributor also sends the painting of a garland of flowers by JEAN PHILIPPE VAN THIELER, who was received into the Guild of Painters in 1648. There is an engraving by BOLSWERT of the Miraculous Draught of Fishes, after the picture which RUBENS painted in 1618 for the Corporation of Fishmongers. The series of portraits of Archbishops of Mechlin begins with that of ANTOINE PERRENOT DE GRANVELLE, born at Ornans, in Burgundy, in the year 1517. There is also a portrait of GUILLAUME VAN ENCKEVOIRT, born about 1464, and created cardinal in 1523. M. VAN DEN HECKE has lent a fantastic landscape by JÉRÔME BOS, who flourished about the middle of the fifteenth century, and chiefly painted diabolical subjects; some game, fruit, and vegetables by FRANÇOIS SNYDERS (1579-1657), with a figure added by JORDAENS; and a cavalry combat by PETER SNAYERS (1593-1662), whose speciality was historical subjects and battle pieces. The senator CANNART D'HAMALE contributes a landscape by WILDENS, born at Antwerp in 1580, who often painted the landscape in RUBENS' pictures, while other artists painted figures in his own compositions. There are two garlands of flowers painted by J. BREUGHEL, called "the Velvet," born at Brussels in 1589, son of PETER, called "Zotten BREUGHEL," and brother of PETER, surnamed "Belschen BREUGHEL." M. R. DE PAUW has sent REMBRANDT'S picture of *The Soap Bubbles*, bearing his signature in full. There is a cavalry engagement at the foot of a fortress, by J. COURTOIS, called "the Burgundian," who was born in 1621, and lived for a long time in Italy, where he learnt the manner of PETRAZZI, CARACCI, and FALCONE. A picture of the Queen of Sheba offering presents to King SOLOMON is painted by JAN BAPT. FRANCK, born at Antwerp in 1599; and another of our LORD curing the Blind Man, by RICHARD VAN ORLEY, born at Brussels in 1652.

The first object in class nine, manuscripts and books, which is very well represented, is a small manuscript Bible of the thirteenth century lent by the Baron BROCQUEVILLE, while Baron BÉTHUNE contributes a breviary of the same period, and the Rev. G. VAN CASTER, a parchment manuscript (various) of the twelfth century, obtained from the ancient abbey of Horeffe, and Monseigneur FRANCK a copy of the Vulgate, copied for the Abbaye de Parc in 1263, which tradition says was used at the Council of Trent. The collection includes several books printed by HENRY THOMAS JAYE, a native of London, who established himself at Mechlin in 1611, received rights of citizenship, and became a sworn printer (*ghesworen boeck-drucker*). He lived in the street, then new, called the Bruel, which is now the main thoroughfare between the station and the Grand' Place in the middle of the city. No. 839 is a description of the cavalcade with triumphal cars organised in 1775 by the Latin schools, to celebrate the millenary of St. ROMBOLD.

The tenth class, music, opens with four leaves of an antiphon of the twelfth century. The eleventh class, seals, medals, and money, contains the common seal of Mechlin in 1426; and also that in 1493 with the displayed black eagle, which the Emperor FREDERICK IV. permitted to be borne in the shield. The seal of the Mechlin Monte-de-Piété of 1620 bears the legend "Beatus qui intelligit super egenum et pauperem, in die malâ liberabit eum Dominus." The twelfth and last class consists of reproductions of ancient works of art.

In the section of modern fine art, among the works belonging to private collections, M. DE CANNART D'HAMALE, senator, sends a view, by VERVLOET, of the interior of the church of Notre Dame d'Hanswyck, at Mechlin; and MM. DELEHAYE FRÈRES a silver-gilt medal—the first prize for drawing from nature obtained by GODEFROID JACQUES EVRARD BEKE at the Fine Art Academy, Mechlin, in 1778. M. LÉOPOLD PLUYS, of Mechlin, exhibits his designs, which have been executed, for the stained-glass windows of the cathedral. One of these, 200 square mètres in extent, represents the Tree of JESSE with the glorification of the Virgin.

Turning now to the section of industrial art, the above-named exhibitor, M. L. PLUYS, has contributed all the many stained-glass windows that adorn the principal room. This is divided into bays, each one fitted up by various firms as a dining-room, drawing-room, or study, and containing

great wealth of carved oak furniture. The first object that attracts attention is a monumental chimney-piece, in the Transition style at the end of the sixteenth and beginning of the seventeenth century, designed and executed by COSYNS and VAN BATTEL. The attitudes of the two caryatides representing mercenary warriors in the service of MAXIMILIAN of Austria, one with sword and the other with musket, is striking and natural. Above is a painted medallion of Poetry, while a fool or jester, in carved oak, appears to be stooping as if about to get down from the upper portion. Brass swivelling handles afford a support to the body when leaning over to make up the fire; and the four fire-irons, by L. BERNAERTS VAN DER VORST, are suspended from a brass stand.

In one of the bays, LUCAS SCHEFFERMAYER exhibits a very pure example of the Flemish Renaissance in a *bahut*, or cabinet, finely carved in oak with hinges and fittings of tinned iron. E. TENGELS-SCHIPPERS has fitted up a tasteful boudoir with Smyrna carpet and imitation of Gobelin tapestry. The cabinet is of carved oak in Flemish Renaissance—subject, the Virgin and infant St. JOHN. A RUBENS arm-chair has the seat and back of gilt leather, while the LOUIS XIV. table is of imitation ebony inlaid with ivory. A salon, fitted up by the same exhibitor, is laid with a small and elegant pattern Dutch carpet, and contains a rich cabinet in Flemish Renaissance, minutely carved in oak with subjects relating to the four seasons. It is decorated with water-colour drawings, a handsome mirror, and stained-glass panels, the latter by M. L. PLUYS. VAN INTHOUDT-HENDRICKX & SONS contribute a handsome sideboard in carved oak (Flemish Renaissance style), left the natural colour and only waxed, with chairs to match; and also another sideboard in English Gothic style, stained to imitate old oak. A *jardinière* and *plaques* in *repoussé* brass are reproductions of fifteenth-century Dinanderie; and a TENIERS table is similarly reproduced.

It is strange that the words chandelier and lustre have exactly opposite significations in England and on the Continent. What we usually understand by chandelier is the pendent lighting arrangement in the centre of a theatre or ball-room, generally with cut-glass ornaments; now on the Continent this is known as a lustre. On the other hand, the chandelier of the Continent is the upright candle-holder, standing on its base or supported by a bracket, that we call a lustre. Lustres, then, in the Continental sense, were exhibited by F. SCHROETER-HOLSTERS, brassfounder and "manufacturer of lustres," one rather peculiar in Flemish style, and the other very handsome with Gothic ornamentation.

To complete our notes of the modern portion, H. ZECH sends a Renaissance bed, a Gothic buffet, and a fifteenth-century cabinet, while his foreman joiner, VAN DE PLAS, contributes an inlaid table-top. VAN INTHOUDT DE KOCK sends oak furniture; J. EVRARD, oak desks; VAN INTHOUDT-HUÛGHE, Flemish Renaissance furniture; DE GREEF, dining-room fittings; and THIELMANS, two handsome oak telescope tables. Nor must mention be omitted of the Flemish buffet fitted up in the temporary refreshment-room. It is in carved oak, relieved by imitation ebony, and presents a remarkably fine effect. It is said that the brewers contribute the local beers, "orge" and "drydraet," free of charge, so that the whole receipts may be available for the fund being raised for the schools. This interesting exhibition was organised by M. MEYNS, architect, of Mechlin, while the president is M. FRANZ BROERS, and the secretary, M. EMILE JANSSENS.

Visitors to Belgium can take the city of Mechlin, with its exhibition, on their way to Brussels. On the arrival of the Great Eastern Company's daily boat at Antwerp, a train starts from the quay for the Brussels line of the State Railway, with Mechlin about midway. "Baedeker" says that there is a large and good buffet-restaurant, with tariff, at the station. This is perfectly true as far as it goes; but we found that what was in the tariff did not in all cases exist in reality, while there were other dishes not on the tariff, and a discrepancy between the prices charged and those on paper. We can, however, conscientiously recommend an hotel, the Cheval d'Or, patronised by the exhibition committee, where we fared sumptuously at a 2½ franc table d'hôte. The walls of the *salle à manger* are tastefully decorated with appropriate subjects by a local artist, who has now left Mechlin to become teacher at the art school of a neighbouring town. Mechlin should be visited on Saturday, Sunday, or Monday, when the machinery of the carillon is stopped for an hour or two in the morning, and the forty-five bells are played with great taste by hand at every half-quarter.



## CIRCULAR NOTES FROM FRANCONIA.—IV.

[BY A CORRESPONDENT.]

BAMBERG, built about its five hills overlooking the radiant valley of the Main, rivals in pictorial attraction and exceeds in situation the more popularly-famed Nürnberg. In character the towns differ: while Nürnberg reflects the arts and industries and the citizen life of a free commercial city of the Middle Ages, Bamberg derives its distinctive features from the rule of an ancient and splendid ecclesiastical principedom, which crushed out the independent spirit of the people and has left no trace of their early struggles in the domestic architecture of a later period. Nürnberg has undoubtedly the advantage in a certain unity of old-world style: its towered walls and sculptured churches and quaint houses are the outcome of one epoch, while the ecclesiastical edifices of Bamberg, of more ancient date than anything the rival town can show, have little in common with the substantial domestic buildings over which they dominate. Nevertheless, Bamberg is unique: the charm lies in a combination of picturesque elements rather than in one prevailing trait.

The old saying runs, "If Nürnberg were mine I would swallow it in Bamberg"—a curious way of hinting at the superior situation of the episcopal city. It is built partly in the plain and partly on five steep hills, divided by narrow valleys or clefts, each summit crowned by a church, a palace, or a tower. On the central height stands the grand pile of the cathedral, with its double apse and four towers, with the picturesque remains of the old bishop's palace on its northern side, and the long flank of the new *Residenz* on the eastern edge of the hill; the Gothic Frauenkirche, the Stefanskirche, the enormous mass of conventual buildings (now converted to secular uses), with the church on the Michelsberg, and the transmuted Romanesque church of St. Jacob, are conspicuous on the surrounding elevations; while off to the north-west rises the wooded height and lofty watch-towers of the Altenburg. Frequent gardens and groups of trees make green interspaces among the streets, and occupy the slopes of the hills, and gladden even the more closely built lower town, through which the river Regnitz flows in three streams, crossed by six bridges. On an island at the confluence of the central and left arm of the river stands the somewhat picturesque Rathhaus, covered with faded frescoes of the eighteenth century. A tower in late Renaissance style, with elaborate balconies, forms a gateway at one end of the upper bridge, a massive three-arched span of fifteenth-century construction, over the parapet of which the views down the river are most striking, and justify the title of "German Venice" given to Bamberg by a Bavarian king. The domestic architecture of the town is the product chiefly of the seventeenth and eighteenth centuries, for between the private struggles of the citizens and their lords, the tumults of the Bauernkrieg, the ravages of the Thirty Years' War from the hands of imperialists and ducal troops, and later from Prussians and from French alike, the citizen dwellings of Bamberg suffered frightfully. Thus the rococo ornate style of the seventeenth century alternates with the solid construction of the next hundred years. It is chiefly from the extraordinary variety and sonorous tints of the red tile roofing, and the irregular disposition of the blocks, that the houses of Bamberg gain their irregularly picturesque aspect, and group into striking street or river views. The colour of the tiling varies from a brick red to a deep brown crimson, the deeper shades being the most prevalent, and the pitch and depth of roof have the pitch of a precipice and the depth of a hill side; they are curved outward and curved inward like the bell of a flower, or they slope swiftly to jutting eaves that cast deep shadow on the wall; they break out into projecting windows all over the surface, like multitudinous eyes, or wink with barely-lifted lids through two airholes slit half-way down; they are piled one above another, or set at all sorts of queer angles, that drive an artist wild with a sense of adventure as his pencil follows the lines. In short, if you want to see what picturesque roofing will do to make a town pictorial, go to Bamberg. In addition to the roofs, however, many houses are quaintly set forth with woodwork and with balconies of wood or fretted ironwork, or, among the older stone buildings, show traces of a prior time to their neighbours, in coats of arms carved on the walls, or curious little reliefs of figures or ornaments, remnants of decorative detail or signs of the former character of the building. The newer quarter of the town towards the railway station is not attractive, except

to a modern sense of comfort and cheerfulness; but the proverbial love of the Bambergers for space and garden ground is likely to save them from the horrors of overcrowding. On the outskirts of the town they have secured and planted a large tract of meadow and park inside the stream of the Regnitz, and at its further end, terminating at the confluence of that stream with the Donau-Main canal, which we met on the hither side of Nürnberg. A fairer kind of public pleasure-ground could not be than this delightful Theresien-Hain, with its half-wild, half-cultivated lawns and avenues, and beautiful groups of native and foreign trees.

From the terraces of the Michelsberg or from the Cathedral Square one may see how finely Bamberg is set within a sharp curve of the Main valley, which here lies north-east towards Baireuth, and west with a turn northwards towards Würzburg. The river itself flows some three miles below the town, where the waters of the subsidiary Regnitz discharge into its ample stream. The broken range of the Franconian Switzerland forms the eastern horizon, with the castle of Geich on the nearer heights; to sunset the rich pine forests of the Hauptmoorwald clothe the sloping ground that rises to the Steigenwald. Southward the valley opens wide towards Nürnberg, and to the north the spurs of the Thuringerwald rise as the Bauzen mountains. Within these blue horizon ranges, and amidst the laughing fertility of the well-watered valley, old Bamberg lifts its brown roofs and stately towers, and gives to the glowing landscape the last charm of colour and architectural forms which it needs to make it one of the fairest in all Germany.

The records of Bamberg show that the present cathedral has been preceded by no less than two earlier structures. The first church, founded by the Emperor HEINRICH II. and his consort (the holy CUNEGUNDA) in 1004, was consecrated in 1012 by the Patriarch JOHN of Aquileia; then sixty-nine years later it was burnt to the ground. The second church was begun by St. OTTO, and finished in 1111. What mischance befell this erection does not appear, although the popular tale speaks of a second conflagration; anyway, only the ground-plan of the outer walls of the body of the church and lower stages of the towers remained, and within them the Romanesque or eastern part of the present cathedral, with the noble crypt, must have been raised between 1175 and 1250, and a third consecration of the building took place in 1237. In 1274 further enlargement was undertaken by Bishop VON FREISING, who obtained allowance out of the taxes for expenses, and to this era in the history of the church belongs the western choir, or choir of St. PETER, which is in the early Gothic style, with apse of five bays, groined vaulting, and connected shafts. Later centuries filled the interior with tasteless rubbish, which the indefatigable LUDWIG I. of Bavaria cleared away when, in 1828, he undertook the restoration, which was carried out by GARTNER.

It is charged against the restorer of Bamberg, as in case of like renovations elsewhere under the zealous *dilettante* King of Bavaria, that, with the rubbish, he swept away much that was interesting and pictorial. Certain it is that in the scraping process, which has restored to the interior its beautiful gray tone, not only frescoes of late and degraded period, but also some of the older work, vanished; only the traces of full-length figures of long-limbed saints remain on the outer side of the choir-screen in the western choir, and here and there faint signs on pillars and walls about the church. At one time the whole interior was *übergemalt*, and doubtless much of such decoration was better rubbed off. A quantity of monuments, altars, and church furniture encumbered the interior, most of which have disappeared. Some monuments were sent to the Michelsberg, some to the Altenburg chapel. Of the time of the Renaissance the chief remainder is the monument of Bishop GEORGE of Limburg (1522) in the Peter choir, a notable importation of early Italian work of the revival. Among the most interesting monumental relics is the gray marble sarcophagus of the learned SAITGER, Bishop of Bamberg, afterwards Pope CLEMENT II. (1047), with curious allegorical figures of the Virtues in relief on the sides, of a Classic type, which suggested the origin of the work to be Roman. Recent writers have, however, decided that the sculpture belongs to the archaic mannerism of German work in the first half of the twelfth century. Rather later in date, but still strongly marked by Classic feeling, is the very remarkable sculpture on the marble enclosure of the Georgen or eastern choir. The outer sides of this screen are arcaded in seven round arched niches,



divided by pillars; in each niche on the south wall stand two apostles; in the seventh *The Archangel Michael Fighting with the Dragon*; on the pillars between HEINRICH II., the three kings, CUNEGUNDA—the last a piece of fifteenth-century work. On the north wall the niches are occupied by the twelve prophets, also coupled in twos; in the seventh the *Annunciation*; on the brackets between six figures in the round, a Madonna with the Infant, a sibyl, a figure of a woman, an angel with curious smiling face, which the people call the laughing angel, and the Bamberg token, a bishop and St. DIONYSIUS carrying his head. This sculpture is all of the same period, probably about 1250, except the CUNEGUNDA named above, and perhaps *The Annunciation*, and is in the highest degree interesting and remarkable. The coupled figures in the niches, whether apostles or prophets, are marked by great variety and energetic, almost dramatic, action, difficult and complicated positions having been boldly attempted by the sculptor, whose imperfect command of the figure betrays him into somewhat comic results. But, on the whole, there is nobility and energy, bold relief and drapery freely cast. For beauty, however, the large, nearly life-size figures on the brackets of the northern side, bear the palm. The sibyl is a grand and significant figure, draped about the head and shoulders, and holding a book; the face expressive and massive, the drapery exceedingly fine in cast. The laughing angel also, with drapery caught quaintly about the feet, is charming and full of character. The extremities—hands and arms—are unusually good and well-formed throughout. It pleases a German critic, grouping these figures in the sculpture of the south portal, and the figures on the shafts of the Prince's door, to designate them as wholly free of Romanesque manner and in the pure Early Gothic style. Free of the paralysing Byzantine tradition certainly they are, but precisely not free of the finer inheritance of Classic style, but rather especially interesting as showing the influence of the Gothic perception of the characteristic upon the generalised typical forms of the Classic mode. So, at any rate, we presume to think.

Another curious piece of sculpture not dwelt upon by the ordinary guide-books is the figure of a rider on his horse, set up on the left of the choir arch at the eastern end, and dating from the thirteenth century. Sometimes called the Emperor CONRAD III., this figure seems more probably intended to represent St. STEPHEN, King of Hungary, of whom the old story goes that riding to Bamberg to court GISELA, the Emperor's sister, he found the cathedral door open and rode right up the nave. But the horse, like BALAAM's ass, was wiser than his master, and stood still at the entrance of the choir, signifying in his dumb fashion that here was holy ground. So STEPHEN was converted and baptised, and lived to win the epithet of saint. The statue is broad and simple, both man and horse suggestive in attitude, as if regarding fixedly something before them in an unconventional and natural manner. They are placed on a platform supported by brackets, of which one is fantastically carved as a human face, made out of trefoils. It would be beside the purpose of these letters to go into detail upon other objects in the cathedral, of which every reader may find account in his "Murray" or his "Baedeker"—the beautiful monument to St. HENRY and the holy CUNEGUNDA, for example, which stands in the centre of the nave, commissioned by the Bishop GEORGE I., of Limburg, in 1499, of TILMANN RIEMENSCHNEIDER, of Würzburg, whose effigies of prince-bishops we saw in the cathedral of his native town. The subject reliefs on the sides of the sarcophagus are of the finest work of the kind in Germany. Those in the church are the best examples of the life scale bronze monumental reliefs of PETER VISCHER and his school, notably that in the Georgichor of the Prince-Bishop GEORGE II., 1505, and in the Peterchor, HEINRICH VON GROSS TROCKAU, 1501, and VEIT VON POMMERFELDEN, 1503. The designing and casting of these bronze reliefs degenerated from such original and elaborate work as these into conventional repetition of an accepted typical design and workmanship of indifferent quality, and as the taste for monuments of the kind declined they became mere tablets with armorial shields and inscriptions. In the Chapel of the Nail, or of the sepulchre off the southern transept of the Peterchor, the walls are literally lined with these reliefs, the whole effect of which is very impressive. But here the gradual decadence of the art can be traced from vigorous portraiture and carefully finished detail to characterless and mechanical work. The work of VISCHER stands at the highest

point of the history of these monuments. There is an early piece in the church of great interest, dating from the thirteenth century, in which the bronze reliefs upon a monumental slab of Bishop GUNTHER, represented in profile, is the precursor of the style brought to perfection by the Nürnberg artist. Another feature in the interior furnishing of the cathedral, which seems generally underrated, is the stall work in the Peterchor, the multitudinous little isolated figures in which are brimful of character and beauty. In the Treasury the visitor should on no account fail to study the bronze candelabrum of twelfth-century work, 1½ mètres high, which is almost unique.

Whatever blame may be cast upon King LUDWIG's restoration architect for his "clean sweep," it must be allowed that the cathedral, as it now stands, is a dignified monument of the transition Romanesque-Gothic, consistent and undisturbed by incongruous intrusions. Its unusual richness in sculpture throughout; the surface ornament; the exterior, especially at the eastern end, which has the further ornamental feature of an open arcaded gallery round the apse; the fine coupled windows and deep mouldings, the noble sculptured portals, the symmetric beauty of the whole composition, with a certain lightness in the lofty towers, give to the otherwise severe simplicity of the pile a grace not often associated with this style of architecture.

This letter has already exceeded limits, and we have no space to conduct our readers to the Michelsberg, where the holy ORTO reposes in the crypt behind the high altar. The church, which is of early foundation, though it has suffered in succeeding centuries, offers points of transition and transformation interesting to an expert. The long lines of conventual building, which surround the two sides of a square, are now occupied by a hospital, a museum, town gallery, &c. From the Michelsberg you must drive down again into the town in order to ascend the neighbouring Altenburg, which, as the crow flies, would be not a mile off. But the ascent through the wood is very steep, and the castle, or what remains of its stout walls and turrets, and the lofty towers which Prince Bishop ADELBERT ALBRECHT, of Wertheim, raised to quell his refractory citizens, are raised on an almost precipitous rock, formed at the top into a small plateau. Off the entrance gatehouse, to which a little drawbridge conducts, is the small chapel of the fifteenth century, restored by HEIDELOFF in 1834, and containing an interesting monument in red and yellow marble to a RITTER VON SCHAUMBURG, 1520, in full armour, and some good old glass. In the upper storey of the gatehouse a small chamber is converted into a museum of old weapons, found about the castle hill or belonging to its history. A vault beneath is called the witches' chamber, from the gruesome proceeding therein conducted by Bishop JOHANN GEORG, of Dornheim, during the Hexenprozesse instituted by him. The views from the tower and castle platform are very beautiful, especially towards evening, and the wooded hillsides afford delightful walks. In fact, no better finish to a sojourn at Bamberg can be made than a parting look upon the old city and its beautiful environs from the height of the Altenburg. And there, leaving our reader to find his own way to the city on the Main, whence we started together on our circular tour, we will bid him farewell.

## HOSPITAL COMPETITION AT HEATON.

THE town council having resolved to erect a public fever hospital on a plot of land on the south side of the North Shields turnpike, near the railway junction at Heaton, the sanitary committee were authorised to obtain plans. A large number of plans were sent in, and Mr. Worthington, architect, Manchester, was appointed referee by the committee to examine and report upon them. Mr. Worthington's report has now been sent in, and considered by the committee. Mr. Worthington reported that the best plan is signed "Red Cross," that second in merit is marked "Isolation," and the third in merit "Sunlight and Air." On the committee opening the sealed envelopes, it was found that the plan marked "Red Cross" has been furnished by Mr. A. B. C. Gibson, architect, of Newcastle-on-Tyne, and that the plan marked "Sunlight and Air" is the production of Messrs. Bradshaw & Gass, Bolton. There is a plan marked "Isolation A" and another marked "Isolation B;" and as Mr. Worthington did not state in his report which it is that he places second, it cannot be stated who will receive the premium for being second in merit. In the recent public competition for the new police station, to be erected in Westgate Road, Mr. Worthington placed Mr. Gibson's plan first, and the council last week agreed to adopt his plan.



# ADMIRALTY AND WAR OFFICES COMPETITION.

ON Monday a departmental paper was issued from the Office of Works with reference to the proposed competition for the Admiralty and War Office, and containing instructions and conditions, schedule of the accommodation required, and plan of the site for the new buildings. The following are the instructions and conditions:—

1. It is proposed by the Commissioners of Her Majesty's Works and Public Buildings to erect new offices for the Admiralty and War Departments on a site adjoining the north side of the Horse Guards.

2. There will be two competitions, the first to consist of sketch designs open to all, and the second or final one to be conducted as hereinafter described.

3. Before any designs are sent in the Commissioners will appoint a committee of judges, one, at least, of whom will be an architect. The judges so to be appointed will select ten designs, or such less number as they may think fit, the authors of which will be invited to compete in the second or final competition.

4. In order to obviate the possibility of the sketch designs lodged in the first competition being made use of by the competitors who may be invited to enter into the final competition, such sketch designs will not be allowed to be seen by anyone except the judges and their officers, by whom they will be returned direct to their respective authors.

5. In the first competition the designs of the competitors must be exhibited by sketch plans, elevations, and sections to a scale of 24 feet to the inch, and must consist of—A plan of each floor; an elevation of each of the principal fronts and courts; at least two complete sections from north to south, and one from east to west.

6. The drawings must be made on sheets of plain paper and mounted on plain stretchers, unframed, which shall be 40 inches long and 27 inches high. The elevations must be in outline only, without etching or shading of any kind, but the windows and other openings may be tinted lightly in Indian ink.

The plans and sections must be tinted in light Indian ink.

7. The accommodation to be afforded in the new Admiralty and War Office respectively is shown by a schedule of the numbers and approximate areas of the rooms for each department, with particulars of occupation, &c.

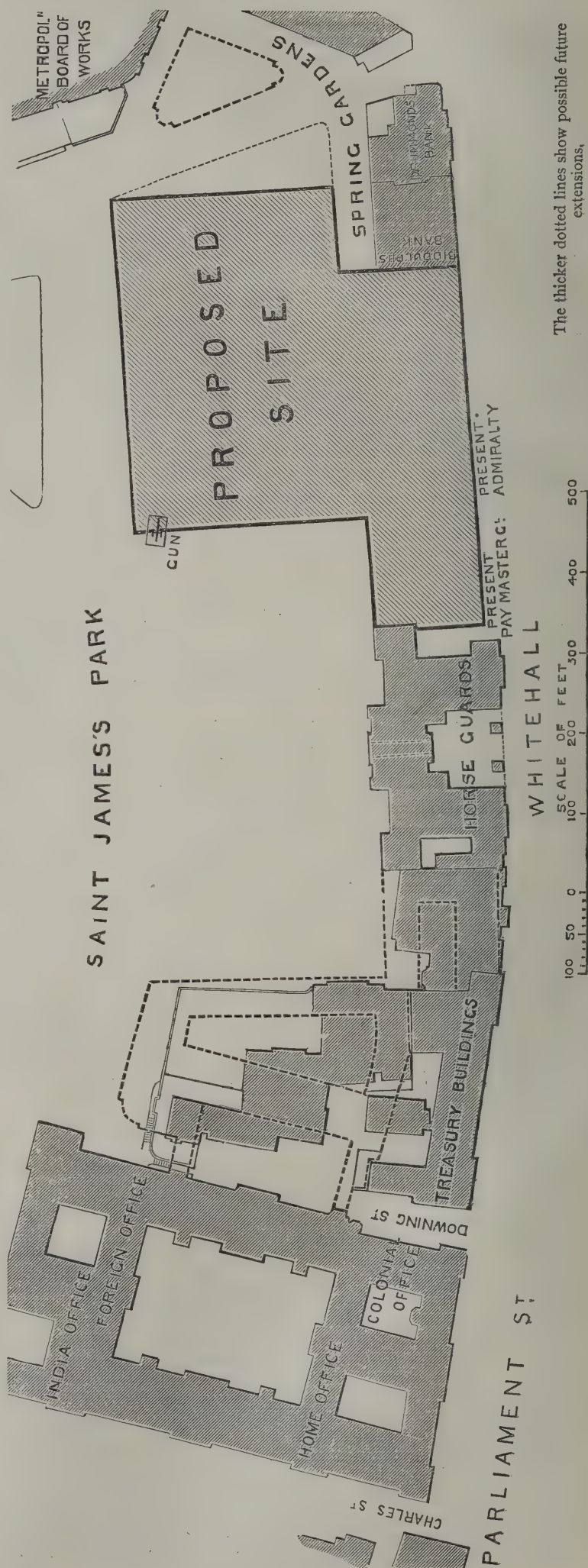
The several rooms proposed to be appropriated to each department and sub-department are to be indicated on the plans by a letter and number corresponding to those in the schedule—those in the Admiralty to be marked in blue and those in the War Office in red.

It is suggested that the different departments should be arranged as indicated in the schedule, but the competitors in preparing their designs are at liberty to make any modification in that arrangement which they may think desirable.

The War Office must be placed on the southern side of the site adjoining the Horse Guards. The rooms of the principal officers of both departments should be on the first floor fronting St. James's Park. There must be a suitable carriage entrance or entrances to the principal courtyards, but not from the south or west sides. Doors may, however, be provided in these fronts for special but not public use. Provision is also to be made for communication between the two departments on each floor.

8. The buildings to be of fireproof construction; provision must be made for warming and ventilating them upon the most approved principles, and particular attention must be given to the general sanitary arrangements.

9. Each design is to be accompanied by a description of the accommodation (stating the areas) provided on each floor for each department and sub-department;





the total cubic contents of each of the two buildings measured from an assumed level of 10 feet below the basement floor line up to half-way between the wall plate and the ridge of the roof; an explanation of the material and mode of construction proposed to be adopted; and an approximate estimate of the cost of each building.

10. The authors of the designs selected by the judges will be invited to enter into the second competition, for which supplementary conditions will be issued. Those conditions will be in general accordance with the above so far as applicable, but may contain such additions or alterations as shall be deemed necessary by the Commissioners of Works.

11. In the second competition each of the selected competitors will be required to send in plans, elevations, and sections to a scale of 16 feet to the inch, together with a perspective view. The competitor shall be at liberty to make such reasonable modifications of his sketch design as he may think expedient. Each selected competitor shall be paid the sum of 600*l.* towards his expenses, provided he shall comply with all the conditions to be hereafter prescribed for the second competition. The whole of the drawings and papers thus sent in shall become the property of the Commissioners.

12. The selection of the architect to carry out the work will be made from the competitors in the second competition, subject to the approval of Parliament.

13. No drawings or photographs or written or printed statements descriptive of or alluding to any of the competitive designs lodged in either of the two competitions shall be sent to the judges, the commissioners, or the public; nor shall any of the designs or copies thereof be exhibited publicly or privately, nor shall any canvassing of the judges or commissioners in favour of any particular design take place. Any competitor violating this condition will be forthwith excluded from the competition.

14. Each design in the first competition must have a design or motto marked on each drawing, and be accompanied by a sealed letter bearing the same device or motto addressed to the judges, giving the name and address of the author, which shall only be opened after the selection mentioned in paragraph 3 shall have been made; and for the purpose of ascertaining the names of the architects to be invited to send in drawings in the second competition, or for the return of unsuccessful designs to their authors. Each set of drawings, if forwarded in a case, must be properly secured and sealed, and marked on the inside of the lid, and in no other place, with the device or motto by which the drawings are distinguished.

15. The designs in the first competition are to be addressed to the judges, but delivered at the expense of the several competitors, and before twelve o'clock noon on March 1, 1884, into the custody of the clerk of the works, Houses of Parliament, at the St. Stephen's porch entrance in Abingdon Street, who will also take charge of the sealed letters above mentioned. Any design which may arrive after that time will be set aside.

16. The designs of unsuccessful competitors in the first competition will be returned to them at the expense of the commissioners. The selected designs will be similarly returned to their authors for the purpose of preparing the drawings in the second competition.

17. The remuneration of the architect will be 25,000*l.* for the entire work, including the sum of 600*l.* to be paid to him for his competition drawings, and the services to be rendered in consideration thereof shall include all those usually performed by an architect, except that he shall be relieved of all expense, trouble, and responsibility involved in determining the times and amounts of instalments to the builders, and in making up the accounts connected with the execution of the works, which will be provided for by the Commissioners of Works.

18. The buildings will be erected in blocks, at such intervals as may be determined by Parliament, and a proportionate part of the architect's remuneration for the entire work will be assigned to each block from time to time by the Commissioners of Works. One-third of the sum so fixed for each block shall be paid to the architect immediately after a contract with a builder for the execution of the works shall have been entered into; one other third part of the same sum shall be paid to the architect as soon as one-half the contract sum shall be paid to the builder, and the remaining one-third part of the said sum shall be paid to the architect after the completion of each block.

19. The plans, drawings, specifications, and other documents relating to the works, whether actually referred to in the contract or not, shall be the property of the Commissioners, and shall be deposited at the Office of Works, and the architect must, at his own expense, make all tracings and copies of plans, drawings, and other documents which may be necessary for the conduct of the works.

20. Except in the case of alterations or additions, made by the previous instructions in writing of the Commissioners, the architect shall not be entitled to any remuneration for his services beyond the sum hereinbefore stated.

21. In case of any additions or alterations to the original design, made by the direction or with the sanction of the Commissioners, the architect shall be entitled to such increased remuneration as may be agreed on, or in the absence of agreement, shall be determined by arbitration in manner hereinafter provided.

22. In case of the architect becoming incapacitated or dying, he or his representatives shall hand over to the Commissioners, or to whomsoever they may appoint, all plans, drawings, and papers relating to the works which may have been in his possession at the time of his incapacity or decease, and he, or his representatives, shall only be entitled to such equitable proportion of the unpaid part of the said remuneration as may be agreed upon.

23. Any dispute or question between the architect and the Commissioners shall be referred to an arbitrator to be appointed by the Treasury, who shall have such powers and authority as the Treasury shall think fit to give him, in addition to the ordinary powers of an arbitrator.

24. No rules of any association or society shall be held binding upon the Commissioners in reference to the works or matters herein referred to.

#### NEW THEATRE, NORTHAMPTON.

PLANS for the proposed new theatre, designed by Mr. C. J. Phipps, F.S.A., have been laid before the Building and Survey Committee of the Town Council and generally approved, subject to some few suggested alterations. The theatre will stand in the Guildhall Road. This strip of ground widens in the rear, and further space will be obtained by the demolition of eight cottages in Cow Lane. Thus the main building will be longitudinally in parallel lines with the Guildhall Road, that part of the building abutting upon it being but a long vestibule or corridor to the principal parts of the house. The total length of the theatre will be 105 feet, of which 37 feet will be occupied by the stage, and 68 feet by the auditorium; the average width is 46 feet. There will be five classes of seats—namely, a small number of private boxes on the balcony level, balcony, upper circle, pit, and gallery. The pit will be a special feature, as it will occupy the whole of the floor of the house, extending under the balcony and dress circle, but it will be so arranged that on the occasions of grand concerts some of the first rows will be convertible into orchestra stalls. The seating capacity of the whole will be about 1,500. Separate entrances will be given to balcony, circle, and pit from the Guildhall Road, whilst the gallery will be approached from Cow Lane. Each of the first three will have vestibules, whilst a special feature on the balcony and circle tier will be a foyer for the exhibition of paintings, statuary, &c. There will be refreshment saloons on each floor, and a box office at the principal entrance, where plans of the house may be seen, and seats booked any part of the day. In case of alarm additional means of exit will be provided for occupants of all parts of the house, both by way of Guildhall Road and Cow Lane. By the double exits thus afforded it is reckoned that the whole house might be cleared in three or four minutes. The landings and staircases will be built in concrete, and all the latest precautions will be adopted to reduce the chances of fire to a minimum. Ventilation will be carefully attended to, and the house will be illuminated by a large sunlight suspended from the ceiling. The stage will be fitted up with all the latest appliances in the shape of scene docks, galleries, flies, and cellars, &c., so that the different component parts of elaborate set scenes may be raised and lowered at one and the same time. There will be six commodious dressing-rooms, green-room, a supernumerary-room, and a band-room. In addition to these, there will be scenic-artist and property rooms. The Guildhall Road front will be composed of white Bath stone in the Classic style. An arcade of three arches will give admission to vestibules leading respectively to circle, balcony, and pit; the next storey will consist of windows, surmounted with a pediment.

In our Notice last week of the death of Mr. George Cole, we omitted to state that he was master of his eminent son, Vicat Cole, R.A.



## NOTES AND COMMENTS.

THE Chelsea Vestry Hall, which has only been built a little over twenty years, is in such a condition that notices have been issued intimating that it cannot be used for public gatherings during the ensuing winter. From the report of the surveyor it appears that in order to restore the hall to a safe condition it will have to be practically rebuilt, and the vestry is now confronted with the alternative of either restoring upon the old lines, or of constructing a larger and more pretentious hall, that would be a credit to the parish and at the same time yield a revenue that might cover the outlay incurred.

It is rarely that an unsuccessful competitor is found to express satisfaction with the good fortune of a rival, but this has been done in Edinburgh. Mr. JOHN McLACHLAN, who attended the last Architectural Conference as a representative from that city, has informed the town clerk of Hawick that he is "delighted that the choice of the referee has fallen upon the design of such an accomplished architect as Mr. WALKER," and that the Hawick authorities may well have the greatest satisfaction in dealing with that gentleman. Mr. McLACHLAN also says "that the appointment of referee was a most happy one, and that he was sure all the competitors would acknowledge cheerfully that they could not have an abler and juster judge than Mr. HONEYMAN." Sentiments like those of Mr. McLACHLAN's do much towards compensating for the efforts which have been made by some of the competitors to deprive a worthy architect of the possession of a prize which he won honourably.

THE dulness of the little town of Hawick has been so much lightened by the town hall competition, we are not surprised to find that the people are eager for more excitement of a similar kind. This time there is likely to be more amusement. A small sum of money has been collected for a BUCCLEUGH memorial, and, with the aid of a grant from the Science and Art Department, some sanguine memorialists anticipate that it may in time reach 2,500*l*. With so much money—the greater part being imaginary—it is proposed a memorial hall, a museum for science and art, class-rooms, a keeper's residence shall be erected, the remainder of the site being filled up with "suitable conveniences," a phrase which may bear a variety of interpretations. At least 8,000 superficial feet of flooring will be required. There are two parties in Hawick on the subject. One would have a low building covering the whole site, while the second party is in favour of a combination of two storeys and one storey. It would spoil the fun if the disputants agreed as to what they want, and architects are accordingly invited to endeavour to solve what is called "an open question" for the benefit of the good people of Hawick. It may be safely assumed that a great number will respond.

THE life of the late JOHN PAYNE COLLIER, who died on Monday, afforded a remarkable example of devotion to old English literature, and it must ever be a cause for regret that a man with his enthusiasm was not living in England a century ago. But his work was not appreciated by many, and his name was unknown to the majority of his countrymen until he published the emendations which he found in an old copy of "Shakespeare." There were people then who did not hesitate to declare that one of the best of English scholars was a forger and an impostor, and it was proposed to issue a "Grimaldi Shakespeare" as a companion to Mr. COLLIER'S. But JOHN PAYNE COLLIER was indifferent to what was said of him by the multitude, and when we find that he printed only fifty copies of some of the emendations, it is not difficult to infer how few were those he cared to please.

THE construction of railways in Japan during the past year has proceeded steadily. From a consular report just issued we note that the number of miles now open between Kôbé and Otsu is 58. Forty-seven miles of this line, the section between Kôbé and Kiôto, lies through the plains, with good gradients and easy curves. On the other eleven miles between Kiôto and Otsu the gradients are heavy, a great portion of the line being laid out to an inclination of 1 in 40, which necessitated more powerful engines to do the work. All the engines are obtained from England, a contract for four new ones

having been given to a Glasgow firm. The iron rails first laid down are being replaced, as they wear out, by steel, in accordance with the modern practice. The rails and all raw material, wood excepted, come from England. On the other side of Lake Biwa railway work was in progress on the branch from Nagahama to Sekigahara, a distance of 14 $\frac{3}{4}$  miles, which was to be opened by the end of April. The works here are light, especially at the Nagahama end, where, for some five miles, the line traverses the plain by the lake side on a small embankment. Further on, at the Sekigahara end, there are some excavations, but nothing remarkable in that way. There is also in hand the line from Nagahama to Tsuruga, which, when completed, will be about 26 $\frac{1}{2}$  miles long. The tunnel under the Yanagase hill is not yet finished. The total length is about 1,400 yards. The heading had, at the end of March, penetrated 700 yards into the hill. The rock is very hard and has given much trouble, but it is being dealt with now by compressed air drills, in the same way as the St. Gothard and Mont Cenis, and the rate of progress is increased thereby. Except the tunnel the line is done, and passengers are, and have been for some time, taken to the foot of the mountain on each side, when they have to get out and walk over the pass.

THE University College at Dundee, which is to be opened in the course of a few weeks, is a notable example of the shrewd way in which building work is undertaken in the North. A site that may well be called eligible was for sale, but upon it was a terrace of five or six detached villas, having the usual bay windows. The demolition of the houses would not be in accordance with Scottish economy, and the architect, Mr. McLAREN, was therefore instructed to utilise them when preparing plans for the college. The fronts, stairs, &c., have been allowed to remain almost intact; a corridor has been constructed connecting all the houses, and will form an excellent promenade in wet weather. The rooms have been transformed into class-rooms, and constitute a college on the pavilion principle. Where the existing buildings were not adapted to teaching, new buildings have been constructed, and the chemical theatre and lecture halls are excellent examples of planning. In fact it may be said that all the money has been expended with the utmost prudence. The trustees appear to have acted on the principle that an industrial university depends for success on professors and appliances rather than on costly buildings.

THE seventeenth annual convention of the American Institute of Architects has, according to the *American Architect*, been a very harmonious and successful one. According to the reports submitted at the meeting, the number of members of the Institute had considerably increased in the year, the Fellows numbering as many as sixty-nine, leaving one vacancy under the rule adopted two years back—a limit which, having since then been found too low, has been abandoned. Various other amendments as to the rules regulating the admission of members to the Institute have been adopted, as well as in regard to the internal constitution of the body. The proceedings included visits to public and private buildings of the city of Providence, as also the reading and discussion of papers. Among these was one on "Strength of Materials," by Mr. LAUZA; on "Competitions," by Mr. Fox; on "The Architect as a Sanitarian," by Mr. CLARK, &c. A novel feature was introduced by a general assemblage of the members on the steps of the church, where a photograph of the party, with the president, Mr. WALTER, was taken.

In a pilaster of the old church at Odilienberg (Netherlands), a stone has been discovered of considerable interest to archæologists. On one of its faces is sculptured what is supposed to be MINERVA, with her helmet on her head and her owl close beside her. The second face, which is in a better state of preservation, bears the representation of another deity, probably APOLLO, his head surrounded with sunlike rays and a bow in his hand. This discovery may perhaps throw some fresh light on an inscription on two other stones found in the same church, which were described in a report of the Abbé HABET's to the Royal Academy of Amsterdam. If carefully detached, an examination of the hitherto concealed faces might reveal an inscription which would apprise us of its pristine destination.

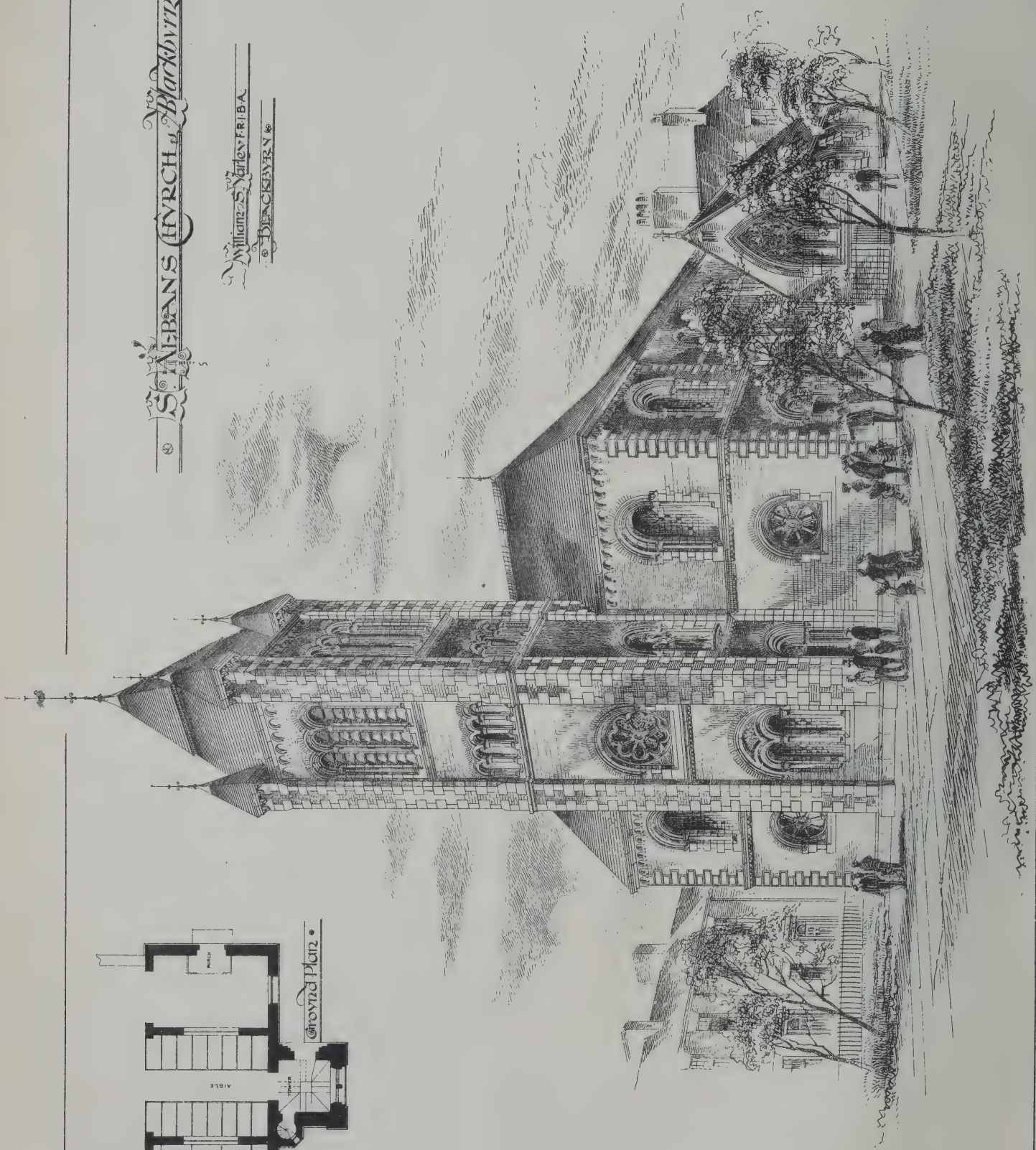
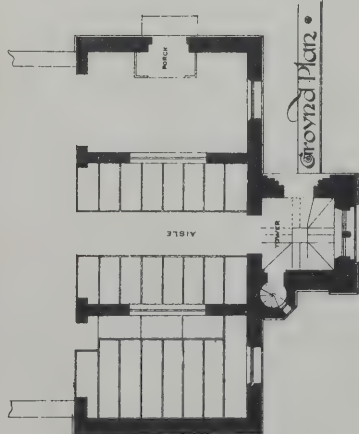






ST. NICHOLAS CHURCH, Blackbyrr.

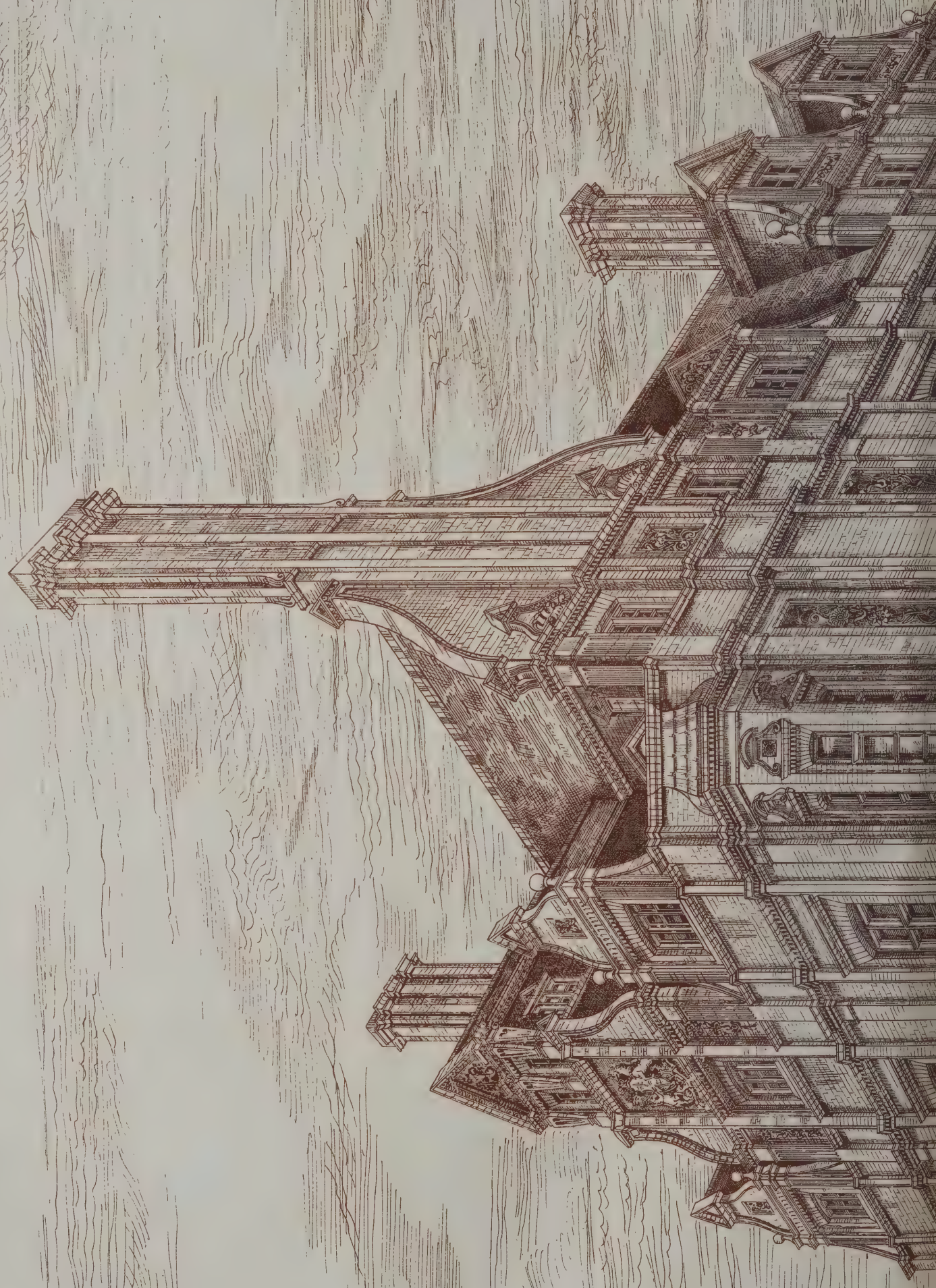
WILLIAM S. NICHOLLS, F.R.I.B.A.  
DESIGNED BY  
J. BLACKBYRR



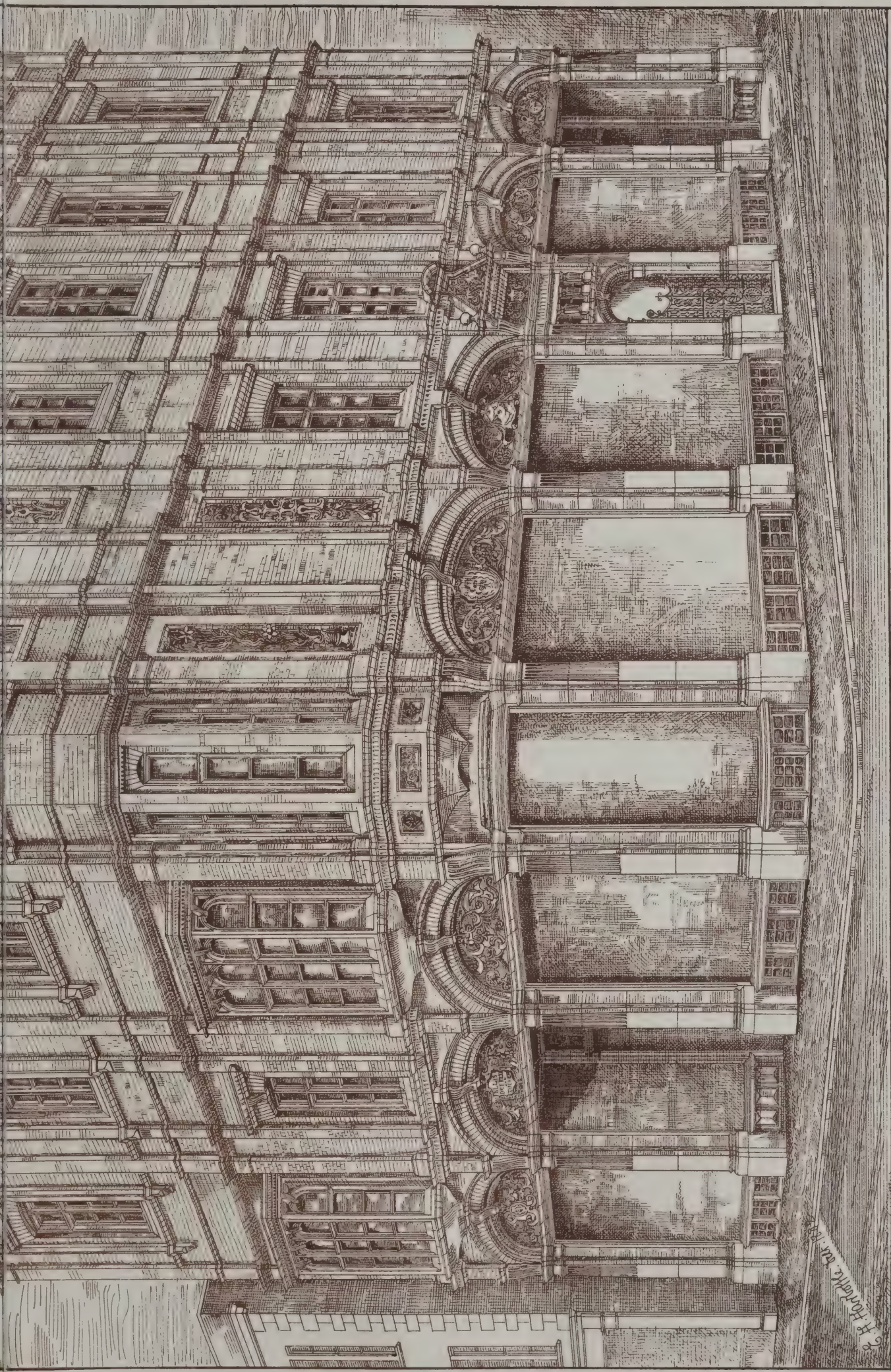












New Premises, Bedford Street Exeter, for Messrs Ellis, Depree and Ticker.

E.H. Harbottle, A.R.I.B.A. Architect.













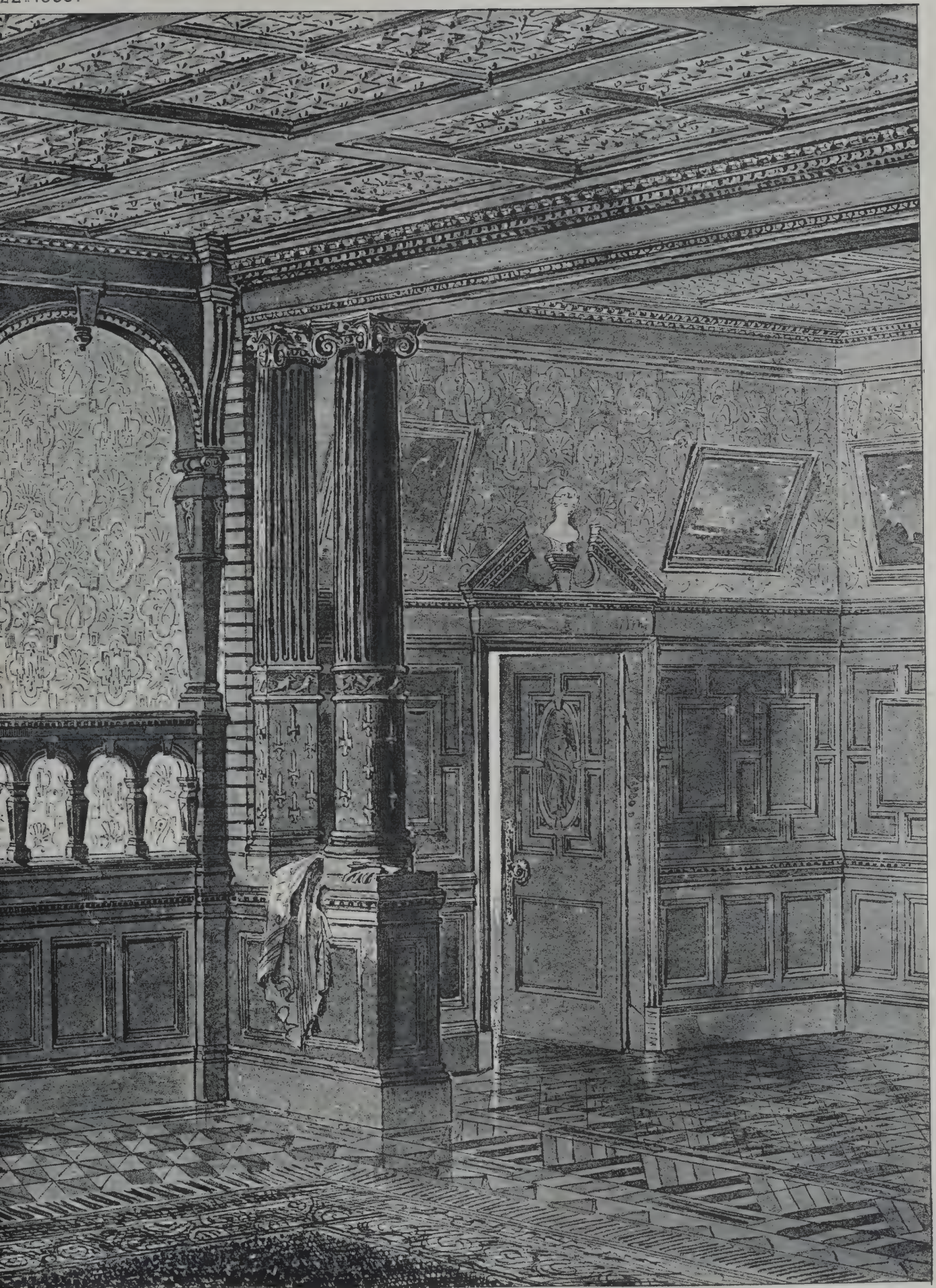
INK-PHOTO, SPRAGUE & CO, LONDON

THE HALL,

PERCY G. STONE,



22<sup>nd</sup> 1883.



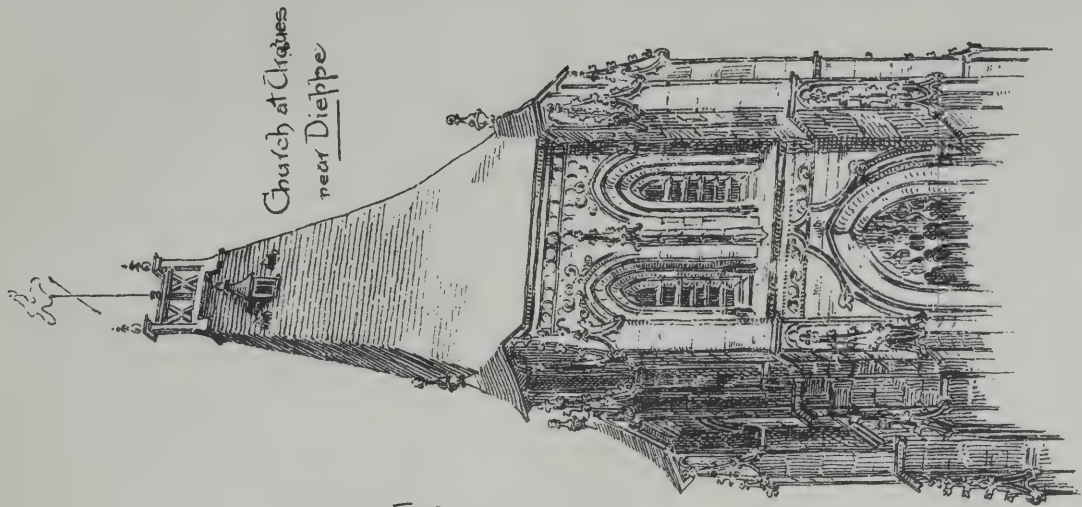
ATHER COURT,

A. ARCHITECT.



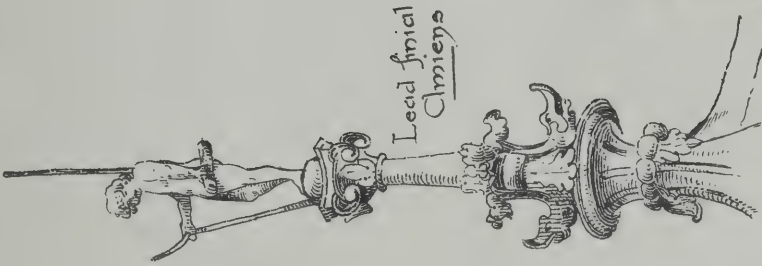




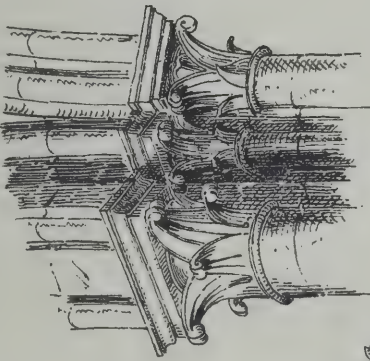


Church at Clécy  
near Dieppe

Sketches of French Architecture  
by Edward W. Jennings



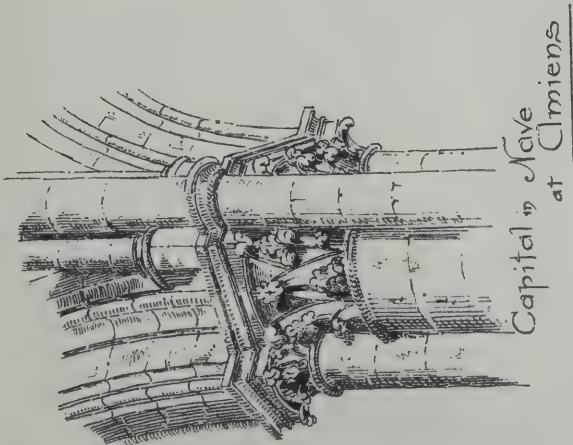
Lead finial  
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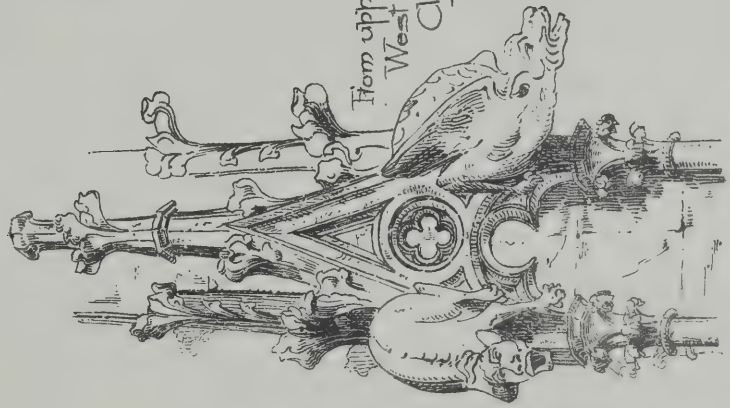
Lion



from a Chapel  
in Amiens Cathedral



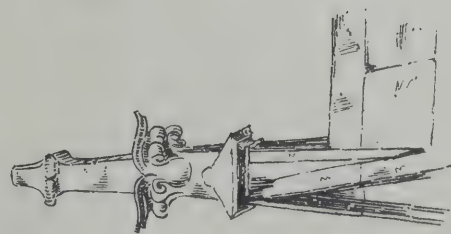
Capital in Nave  
at Amiens



From upper gallery  
West Front  
Amiens



Gargoyles for Amiens



Stone Finial  
Amiens







## ILLUSTRATIONS.

THE HALL, NETHER COURT.

OUR illustration, taken from the original drawing in this year's Academy, exhibits the interior of the inner hall, or salon, Nether Court, Hendon, built for Mr. HENRY J. JUBBS. The staircase and screen are of wainscot oak. The chimneypiece is of Chilmark stone, and the flooring of oak parquet. The house was finally finished Midsummer of the present year.

NEW PREMISES IN BEDFORD STREET, EXETER.

THE illustration shows new business premises, erected from the designs of Mr. E. H. HARBOTTLE, of Exeter, for Messrs. ELLIS, DEPREE & TUCKER, goldsmiths and jewellers, at the corner of Bedford Street. The greater part of the building is occupied by the firm as a jeweller's shop and private residence; the remaining portions are intended for offices, and the shop in Bedford Street is occupied by Dr. WOODMAN, owner of the celebrated Alphington Nurseries. The shop and offices occupied by Messrs. ELLIS & Co. are specially adapted to their purpose, the floor and ceiling being of DAWNAY'S patent fireproof construction; the walls are lined with steel sheets, and the windows provided with iron roller shutters. There are strong-rooms and safes provided for family plate and other valuables. The fittings of the shop are made in walnut and ebony, and are designed by the architect. The exterior of the building is of red brick, manufactured at Bracknell; the roofs are covered with Bracknell red tiles, and the pilasters are of yellow Mansfield stone. Messrs. STEPHENS & BASTOW, of Bristol, were the contractors for the whole of the work, except the shop fittings, which were made by Messrs. DREW & CADMAN, of London. The carver of the brickwork was Mr. ALGAR, of Exeter and Plymouth. All the work is elaborate and of the very best quality.

ST. ALBAN'S CHURCH, BLACKBURN.

SKETCHES OF FRENCH ARCHITECTURE.

THE sketches reproduced in the illustration form a companion sheet to the plate published in *The Architect* of last Saturday.

## THE RAPHAEL EXHIBITION.

THE Raphael exhibition which has been opened in the north corridor of the British Museum, lately made available by the withdrawal of the natural history collections, has been organised in accordance with a suggestion of Mr. G. W. Reid. The exhibition consists of 152 carbon photographs of studies, sketches, and drawings, which are either by Raphael, or sufficiently in his manner to have secured in many skilled quarters the benefit of the doubt. The originals from which these photographs are taken are distributed amongst various cabinets and galleries in this country and on the Continent, and over sixty of them, numbered in the exhibition from 3 to 62, are from the so-called "Raphael Sketchbook," preserved in the Academy at Venice. There can be little doubt that two of the drawings (Nos. 48 and 50) are by Raphael himself; and scarcely any that the others are the production of Pinturicchio, some of the sketches for whose frescoes are in the Sistine Chapel in the Vatican. No. 1 of the collection is a portrait of Raphael, reputed to be by himself, but with little real claim to authenticity; but an undoubtedly genuine specimen of Raphael is to be found in No. 63, which is a study from the altar-piece in the Vatican representing the coronation of the Virgin. The original study is in the possession of the trustees of the British Museum, and the date of its execution was about 1502. It seems pretty certain that No. 64 is a study from the same composition, though not by the same hand. The numbers ranging from 73 to 76 inclusive present four admirable genuine studies executed in 1505-6, from the *Madonna del Prato*, in the Belvedere Gallery at Vienna. What will probably be considered as the most interesting of the Entombment Studies is that numbered 85, which represents an original in the print department of the British Museum, and which by far surpasses the painting in the Borghese Library. Very interesting, again, are the two studies, 92 and 93, containing Sonnets by Raphael, one of which is in the British Museum, with slight sketches for a figure in the *Dispute of the Sacrament* in the Vatican, the execution of which may be referred to the years 1507-8. The sketch numbered 114, and engraved by Mr. Fagan, is an exquisite representation of the *Virgin and Child*, the original of which, believed to be a study from the picture belonging to Mr. J. R. Mackintosh, was purchased by the trustees

of the British Museum for the sum of 600*l.* at the Wellesley sale in 1866. The date of the execution of this work is 1511. Another attractive drawing, the production of which may be fixed to the year 1514, and the original of which is now in the Vatican, represents two nude figures forming part of a group from the Battle of Ostia. This drawing was sent in 1515 to Albrecht Dürer by Raphael, who, according to the testimony of an autograph marginal note by Dürer himself, presented it to the great German master as a specimen of his manner. Nos. 145 and 146 are two drawings from the Farnesina at Rome, which are undoubtedly by Raphael, and were executed for Agostino Chigi, 1518-19. The final numbers of the exhibition, 150, 151, and 152, are three studies for his last but unfinished picture of the *Transfiguration*, which even in its incompleteness is one of the *chef d'œuvres* of the Vatican. No. 150 represents two small full-length nude male figures, one of which has the hands clasped over the breast, whilst the left arm and hand of the other are uplifted from the shoulder. No. 151 is the heroic head of St. Andrew, and No. 152 exhibits the heads and hands respectively of St. Peter and St. John. It was the unfinished canvas of the *Transfiguration* which was placed near the bier of the artist, who died on Good Friday, 1520, as his body lay in state in the room in which he had been accustomed to study.

## THE BEN NEVIS OBSERVATORY.

THE building proposed to be erected on Ben Nevis for the purposes of an observatory has been commenced, the designs having been prepared by Mr. Sidney Mitchell, architect, of Edinburgh. What is now in course of construction is a substantial one-storey building, intended as a residence for the observers, the further development of the plans being held in abeyance for the present. The building is situated within 80 feet of the ordnance cairn, marking the summit of the mountain. Externally, it will resemble nothing so much as the Cyclopean buildings of the ancients, being constructed of large blocks of stone, such as are found in abundance over some ninety acres of the mountain top. No mortar is used, but there will, it is understood, be no difficulty in giving the desirable stability to walls which are to have a thickness of 4 feet at bottom and 3 feet at top. Within the rough but substantial casing thus provided there will be placed as an independent structure, separated from the stone work by the space of an inch or two, a firmly compacted wooden frame house. The outer walls will consist of two sheets of boarding, set four or five inches apart, and furnished with a double lining of felt. Of similar construction, though without the felt, will be the partition walls; while the flat roof will also be formed of double boarding, nailed above and below the rafters, with a sheet of felt in the interspace, and the outside covered with lead. The entrance, placed on the south side, and near the west end of the building, will be protected by a porch, having doors on its east and west sides, one or other of which can be opened according to the direction of the wind. To the southward the porch will be protected by a large coal store, rising to the same height as the main building, and roofed with tarpaulin. Straight in front, on entering the house, will be found the offices and store-rooms, the largest of the latter measuring 7 feet by 6 feet. Turning to the right, a short passage will give access to the principal apartment, measuring 13 feet square, and lighted by two windows, on the south side, intended to be occupied as kitchen and living-room. This will be furnished with an American stove, available at once for heating and culinary purposes. On the east side of the kitchen space will be found for two bedrooms, measuring 7 feet by 6 feet respectively, both being so placed as to get the benefit of the stove, while each has a window affording means of ventilation. Opposite will be a third bedroom, 5 feet by 9 feet, also provided with a window; while, opening from the north side of the kitchen there is to be a small recess with a window filled in with plate-glass, from which observations may be made upon instruments fastened to the wall outside. The windows all over the building will be recessed to the extent of the entire thickness of the wall, so as to diminish the pressure of wind before it impinges on the glazed framework. The casements will be double, corresponding with the double boarding of the wooden walls, the outer one being made to open outwards, the inner one inwards. A built drain is carried all round the house, so as to insure dryness, and over the lead of the roof will be placed snow-cradles, with the view of preventing the choking up of the water-pipes in case of thaw. For the sake of warmth, the wooden framework of these cradles will probably be covered with turf, held to its place by means of ropes attached to rings in the walls, just as one often sees the thatch secured on West Highland cabins.

The Dean and Chapter of Ripon Cathedral have recently improved the north-west of the cathedral by pulling down several houses, and, in order to improve the road, they have presented a thousand square yards of land to the town, conditionally on the Corporation contributing a certain sum towards the improvement.



## PARIS NOTES.

A NEW bridge, the Pont de Tolbiac, has lately been opened for traffic across the Seine in East Paris. It has been built on almost the same plans as the Pont National and the Pont Bercy, between which it lies, and like these it serves to connect the Orleans and Ivry quarters on the left bank with those of La Rapée, Bercy, and La Grand' Pinte on the right. In one respect, however, it fills a more important rôle than either of its neighbours, for the Rue Picard leading to it on the left bank forms the eastern end of the great thoroughfare—one of the most important on that side of the water—which leaves the Pont de Grenelle at the other and western extremity of the city, makes a great semicircle through the 15th, 14th, and 13th Arrondissements under the successive titles of the Rue Linois, des Entrepreneurs, de l'Abbé-Groult, de Vouillé, d'Alésia, de Tolbiac, and Picard, and terminates at the new bridge. On the right bank the outlets for traffic are not as yet so important, but a newly-made avenue connects it with the Place de la Nativité, the central point of Bercy, whence a new street now in course of construction will shortly give access to the Place Daumesnil, and so on to La Villette and Montmartre by the line of the old exterior boulevards. Previous to the seventeenth century the furthest bridges on the eastern or upstream side of Paris were the Pont-au-Double and the Pont Notre-Dame; during the reign of Louis XIII. were built the Pont de la Tournelle over the main stream, and the Pont Marie over the small arm. The eighteenth century did nothing under this head for Eastern Paris; but during the present, no less than ten have appeared—the Ponts de l'Archevêché, d'Arcole, de Louis-Philippe, de la Cité, Saint-Louis, de Sully, d'Austerlitz, de Bercy, National, and de Tolbiac; and Parisians may now boast with truth that their city is better provided with bridges than any other in the world.

In a few weeks' time the present Morgue is doomed to disappear, and the establishment will be transferred to the Caserne de la Cité. It may be interesting to know that the lugubrious institution originated with the Sisters of Mercy (*filles hospitalières*) of Sainte-Catherine, generally known as the Catherinettes, who undertook to pick up the dead bodies found lying in the public thoroughfares, and bury them at their own charge in the Cemetery of the Innocents. In 1714 this merciful function of the Sisters is found to have lapsed, for the dungeon of the Châtelet was then used as a receptacle for unclaimed bodies, which were thrown down pell-mell on a thin layer of straw and left until sought for and recognised by some relation or friend groping about by the light of his own lantern. In 1804 the Morgue was transferred to the old slaughterhouse of the Marché Neuf. The existing Morgue was established in 1864.

Colossal photographs of the three windows that form the apsis of the cathedral of Poitiers have lately been taken, and are now hung in one of the vestibules of the Fine Arts Department in the Rue de Valois. These windows, which were thoroughly restored in 1882, are universally acknowledged to be the finest in France, both from their antiquity and from the great variety of the subjects, all representing scenes of Old or New Testament history.

Thirty-six artists took part in the competition for the Prix Troyon for landscape painting, which this year is worth 2,400 frs., double its usual value. The subject was, *A team of oxen yoked to a waggon, guided by a driver, and descending a hollow forest road in early morning*. The canvases sent in will be exhibited during a month at the Caen Museum in the left wing of the Institute.

A remarkable collection of paintings by old masters, which has come into possession of the present owner by inheritance, is now open at 250 Rue St.-Honoré. Among the great artists whose names figure in the catalogue, are Lancret, Nicolas Poussin, Troyon, and Claude Joseph Vernet, as representatives of the French school; and Michael Angelo, Correggio, Caracci (Annibale), and Guido of the Italian masters. There are also a few works by Potter, Schweichardt, and Rubens. Perhaps the gem of this interesting collection is a picture by Potter, *A Bull and a Dog*, which is considered one of the best from this artist's brush.

A Dutch amateur, M. J. Zürcher, who owns a very fine collection of pictures, has purchased seven paintings at the Amsterdam Exhibition, six of them being from the French section—*The Temptation of St. Anthony*, by Morot; *Evening*, a landscape, by Adolphe Guillon; *The Fates*, by Agache; *A Wreck*, by Flameng; *An Old Cornish Road*, by Boudier, and *Father Jacquemin's Cellar*, by Thomas.

The foundations, or lower part, of the pedestal upon which is to be erected Bartholdi's colossal statue of *Liberty lighting the World*, are estimated to cost 16s. 6d. the cubic yard, or a total of about 10,400l. They are to be made in concrete, consisting of cement, sand, and pulverised stone, will be 48 feet 8 inches in height, and cover an area of 93 square feet at the base, tapering slowly to 70 square feet at the top. They commence 15 feet below the surface, and rise 67 feet 8 inches above low-water mark. The pedestal itself will shoot up another 112 feet, with a base of 67 square feet, and a top surface of 40 square feet. The contractor has undertaken to complete the foundations by November 15 next.

## THE VENICE OF THE NORTH.

THE old Flemish city of Bruges lays claim, and not without cause, to be called the Venice of the North. Her many canals and countless bridges give her even to this day some likeness to the fair Queen of the Adriatic, but that resemblance must have been still more striking when her now deserted canals were thronged by the shipping of all nations, when her now ruined quays were crowded with bales of goods from all quarters of the globe, and her now grass-grown streets were alive with the bustle of a world-wide commerce. Enough of her ancient glory yet remains, chiefly in her domestic architecture, to prove that the author of the little book before us\* has in no vainglorious spirit given to the city he knows and loves so well the attractive title of the Venice of the North.

Our author is a most competent and pleasant companion for such as may be tempted to stroll through the streets of the old Flemish city. He is a local antiquary and historian of ability, and is the editor of a local paper, *Rond den Heerd*, which, for those who can read Flemish, contains many interesting articles on the legends, history, antiquities, and language of Flanders. M. Duclos is, therefore, well fitted to conduct us through the maze of streets—dull, narrow, and winding—which, two hundred and more in number, make up the city of Bruges. And of these many streets we venture to say there is not one which has not something of interest in it, for the traveller who cares for what is historic or picturesque. The student of architecture will find in the streets of Bruges much to repay him for toiling over their uneven and tiring pavement. As an instance of the architectural interest of these streets, we may mention that we lately found in one of them three young men standing in a group almost back to back in the centre of the roadway, like skirmishers preparing to resist cavalry. Each was armed, not with a rifle and fixed bayonet, but with paper and pencil, busily engaged in making architectural studies.

Bruges is a rich mine for such studies. No town, we may safely assert, has better preserved its domestic architecture of the last three hundred years. It has even kept two specimens of houses built in wood that date from the sixteenth century, although all such houses were ordered to be demolished so long ago as 1634. But the variety of the domestic architecture of Bruges is not its only merit.

"The mason's art," remarks M. Duclos, "attained at Bruges during the Middle Ages a richness unknown elsewhere. In 1480 it assumed its distinctively local character, which is to be found in all its domestic edifices down to about 1640. A wise set of rules kept alive sound artistic traditions. Thus the masons of Bruges, by the terms of the charter of their corporation, could not admit as master-mason anyone who had not produced certain designs on given subjects and executed two works of art such as the charter specified. It is probably to this rule are due the splendid chimneypieces which adorned many of the houses, and of which some interesting examples are still to be seen." M. Duclos goes on to point out the distinctive feature of the domestic architecture of the city, and incidentally remarks that it did not feel the influence of the Renaissance until the second decade of the seventeenth century, although the interior of most of the churches had succumbed to the bad taste of that movement at an earlier date. This was probably due to the fact that the iconoclasts of the sixteenth century had devastated most of the Flemish churches, and when they were reopened for worship those charged with restoration could think of nothing better than plastering them over to give them a Grecian or Roman appearance. How much beauty,

\* "Bruges en trois jours. Promenades dans la Venise du Nord." Par Ad. Duclos. Bruges, 1883. Claeys & Vandevyvere.



how much of real art, was hidden by this rough and ready process is shown by the beauties daily brought to light by skilful restorations. At the church of Notre Dame the removal of nearly six inches of plaster revealed some exquisite mural painting, quaintly carved mural tablets, and some finely-worked pillars and arches. At St. Jacques' Church the plaster has been removed from a rich oak ceiling. Likewise at the churches of St. Giles and of Notre Dame de la Poterie the knocking away of many cartloads of plaster brought to light a mine of hidden beauty. Perhaps we should be grateful for the vandalism that executed this plastering, as it has kept for our enjoyment much that time by itself might have destroyed, and has provided us with a curious number of architectural palimpsests.

A number of the old houses of the city have recently been restored and relieved of the cumbersome wooden cornices and coats of whitewash, under which the bad taste of the French in the early years of this century had concealed so many a picturesque red brick gable. It may be here noted that most of the buildings in Bruges are built with small bricks, stone being scarce, and the country for many leagues around being a sandy plain. Most of the stone that has been used in Bruges has been brought from the quarries of Hainault. The cathedral and other churches and the belfry are almost entirely of brickwork.

Honour is due to the people of Bruges for the efforts they have and still are making to keep up the ancient picturesqueness of their town. The new buildings are generally in a style agreeable to that of the more ancient edifices. The new Normal School, a large and effective building, is, to our mind, a masterpiece of Bruges architecture, and will well repay a visit by any interested in such matters. It is in the style of the sixteenth century, and has been erected from the designs of M. L. Delacenserie, the architect of the town, on ground formerly belonging to the Archery Guild of St. George's. A vaulted staircase and tower of an older building is being worked into the new. The stonework of the dormer windows of the school is, perhaps, too heavy and florid. M. Delacenserie, in conjunction with M. René Buyck, has submitted plans, in the same style, to the Government, for rebuilding the eastern side of the market place of Bruges. A convent of nuns near the gate of the Béguinage, a hall for meetings of religious societies a little way to the right as the traveller quits the railway station to enter the town, are new buildings also worthy of notice. The new railway station and a new church, in course of erection by the Jesuits, should be noticed, even if they cannot be admired. But it will be to the older monuments the traveller will more gladly turn, all of which are ably treated by M. Duclos. The volume is further enriched with lithographs from careful drawings, forming useful memorials of the most remarkable edifices of the place.

M. Duclos discusses, at some length, the question how to restore the façades of private houses in Bruges. The difficulty lies in the fact that, in many cases, merely to scrape the bricks and reface the stones does not suffice, for time and worse enemies have defaced irreparably both stones and bricks. Under these circumstances, many houses have been repainted in oils to reproduce the old red and white brick and stonework. This proceeding can hardly be considered strictly legitimate, but that it adds to the picturesqueness of the streets there is no doubt.

It is not generally known how much of architectural interest there is to be found in the villages around Bruges. On the way out to these, too, the various gates of the town still are to be seen—fine examples of the military architecture of the Middle Ages. It is to be hoped the local authorities will not consent to their demolition, as they have to that of the many quaint windmills which from time immemorial stood on the ramparts around Bruges.

At Lisseweghe, a village between Bruges and the sea, on the line to be taken by the proposed ship canal, is a handsome church, with a lofty and solid square tower of brickwork—a fine specimen of those towers not uncommon in maritime Flanders. Near here stood the abbey of Ter Doest, of which only a large granary, supported inside by a double row of oak pillars, erected in 1280, remains. At Damme, on the north of the town, is a small but handsome town hall of the fifteenth century. Near this, at Vive-Capelle, is a church, schools, presbytery, and dwelling-house—very good specimens of modern Belgian architecture in the old style, from designs by the Baron Béthune, of Ghent.

To end this stroll, which we have unwittingly prolonged beyond the limits of the town, we will recommend any who have

yet the time still to spare, and have not been to Bruges, to go there at once. Young architects will find there much to interest and inspire them. The early days of October, too, are very often the best in the year for a trip to Belgium, for occasional showers keep down the sandy dust that overpowers the traveller in the summer. Lastly, M. Duclos' little book will prove an interesting souvenir of the visit to the old Flemish city.

## ENGLISH SCHOOL OF IMPRESSIONISTS.

A SOIRÉE has been held in the Walker Art Gallery, Liverpool, where the autumn exhibition of pictures is now on view. In the course of the evening a paper was read by Mr. P. H. Rathbone, on "The English School of Impressionists as illustrated in the present Autumn Exhibition." Mr. Rathbone said: The young school of artists, whose works are exhibited chiefly in this room, are trying an experiment which may have much effect upon English art, beneficial or mischievous, according as to whether it is treated as an idle and passing fashion, or whether it is earnestly studied with a view to carry out its principles with unflinching truthfulness and diligence. It is in some respects the converse movement to that commenced by the pre-Raphaelite brethren about thirty years ago. The old pre-Raphaelites painted what they knew to exist, and verified as existing bit by bit, no point of the picture being less carefully finished than any other, so that their pictures gave an impression of restlessness, because they did not direct the eye to any special point of view. All details of the picture, whether in the eye's focus or not, clamoured equally for recognition, and an absence of atmosphere made itself felt. There is a great deal to be said in favour of this method of working. It induces great carefulness, and is a deadly enemy to scamping work, which was rather the tendency of the English school when the pre-Raphaelites began their crusade, which has been a very beneficial one for English art. The new school do not profess to paint the whole, but, as I gather from an examination of their work, the impression received from a scene or an object at a given time and under certain states of the atmosphere, and with the eye and attention directed to given points. Turner, the arch-Impressionist, carried this idea out to its extreme limit. He said in effect, "Here are certain colours, certain effects of light and shade of atmosphere, which exist in the scene before me, and which so absorb my attention that I point them out to the student, and merely indicate all the rest, giving a vague sense that it is there, but does not occupy the attention." This is, as I have said, the extreme limit of Impressionism, and a great deal beyond what it is safe for any but a painter of supereminent genius to go. The painters to whom I would this evening direct your attention are far from going to this extreme: they paint the scene, and don't merely indicate it, as Turner in some of his later work seemed to do. Take for instance the picture by Mr. Stott, hanging on the opposite wall, *The Kissing Ring*. A group of children are dancing in the grey twilight upon the wet sand, apparently, at first sight, slightly painted and even sketchy. It is, upon close examination, most thoroughly thought out, and studied from nature with loving care. The spectator feels at once how the sand is wet enough, and yet not too wet, to be firm. Observe the reflection of the children in the little pool is more clear than the children themselves. Strange this, is it not? It is true, however. Note the little pink tinge on some of the little pools left by the sea, carefully discriminated, so that, though you cannot find out in the picture the light that causes it, you instinctively feel its truth. If you look at this picture for some time, carefully isolating it from all the surrounding work, you begin to feel as if you were looking at the scene itself in a distinct state of the atmosphere, which may and will vary from minute to minute as twilight closes in, and you become impressed with the reality of the picture and it seems to arouse in you the same tone of feeling, the same line of thought, that the actual scene would do. In fact it is not only the body that is represented, but the spirit of the scene which is infused into the picture. Next to this picture is one by Mr. Millie Dow, *Tramps at Sundown*. Here are two tramps crossing a gloomy waste of sand and rushes in cold grey evening, while in the distance a gleam through a break in the clouds lights up and defines a group of houses towards which they are directing their steps. The effect of this isolated gleam, giving distinctness to the houses in the distance when all else is misty and undefined, is well indicated, and there is much feeling and intention in the picture. Over the picture by Mr. Stott, another by Mr. F. O'Meara, *Evening in the Gatinais*, has also many of the same characteristics, but there is a sense of restfulness and peace which is special to it. A girl is sitting by a streamlet in a wood, but on either side of the picture are grey and white buildings respectively seen through the woods. I would point out that the artist has had sympathy with the anatomy of the trees, and they have their own character and life. So many of our tree-painters forget this, and make their trees more or less crooked and rugged poles with foliage attached, forgetting that a tree is a living organism of which the trunk is a living and characteristic part, that it is worth



while pointing out when a young painter does give life and individuality to his trees. The three pictures, together with No. 413 on the opposite wall, where two children are resting on sandhills, a few sparse flowers cleverly scattered in the foreground to relieve the otherwise monotonous tone of the subject, are all in a very subdued brownish grey, which at present seems to be very much in vogue among our younger artists; and even Mr. Joseph Knight, two of whose finest works are exhibited in this exhibition, seems to confine himself to sand colour and dull green.

The next picture to which I would direct your attention is in a different key, by Mr. Blair Bruce, *A Pear Orchard*. Here attention is fixed upon a boy looking up at a pear tree, but when the eye wanders for a moment it is caught by the contrast of the colour of a light-coloured cart standing against a dark background of wood, which causes the eye unconsciously to define its outline. But the chief attention is directed to the boy's action, and his countenance is therefore distinctly defined. While we are only vaguely conscious of the countenances of the other two children, and so of that part of the tree at which the boy is looking preparatory to shaking some of the pears off, it is distinctly defined because the attention is specially directed to it. Nevertheless we are conscious, though dimly so, of the other features of the scene; the rest of the foliage and the grass, though blurred and indistinct, we feel to be grass and foliage. Below this picture hangs *The Convent*, by Mr. Forbes. The city is fortunate in possessing one of this painter's pictures, and I am informed that one of his works would have been bought out of the Chantrey Fund had it not been unfortunately painted out of England, and so not coming within the terms of the bequest. It must strike the spectator how the artist seems to see everything through a blue medium, and it naturally occurs to ask—Is nature ever like this? Is there ever a scene so completely blue? The answer is that the blue is in nature, if it is looked for; and that, if blue delights the eye, every object with blue in it arrests the attention, which passes over other colours, so that the impression remains with the artist of a blue nature. Other artists are impressed with other colours which accordingly tinge their work. So long as this is really the result of the impression upon the artist, and does not degenerate into a lazy habit of constantly recurring to the same colour to save the trouble of constant and a wearied observation of nature, it is well; but the danger is that it may become a habit and a trick, and consequently untrue and mechanical. Over the central picture is *Lost and Found*, telling a simple story simply and well. In No. 337, T. F. Goodall, we have a different key of colour—*Rocklandbroad, Norfolk*, is seen under the cold, steely effect of an autumn evening, relieved by the red-tiled roofs of the buildings in the distance. The character of the face of the man who is ferrying the load across is well indicated without being defined. Miss Bertha Newcombe's *Evening* deserves also notice from the careful way in which the central group is defined in the details, while those of the other groups are faintly but subtly indicated. It is, however, now natural to ask how the Impressionists deal with the higher branch of art, the human figure. Unfortunately we have only four or five single figures in this exhibition, but one of them, a portrait by Mr. Lathangue (an Englishman, though his name sounds foreign), is a good example. It will be observed how indistinct the outlines are upon examination, yet the figure is firm and solid, and giving the impression of individuality and resemblance to a characteristic subject. Mr. Woodlock has two in this room, *Yusef* and *Love's Letter-box*, both characteristic of the school, but not, I think, doing him as much justice as *An Old Acquaintance*, a portrait of Mr. Samuelson looking carefully over an old violin. There the intention is excellently carried out—the light, shade, and expression are all forcible and characteristic; you get the impression of a living man actually occupied, not merely passively vacant, as is so generally the case with portraits or studies. I would also call attention to a water-colour of Mr. Woodlock's, *The Rendezvous*, which is a young damsel waiting for, perhaps, some other young damsel, or perhaps not; but at any rate, the grace and feeling of which makes it quite worth notice. Here, also, you see the effect given with an absence of defining line, but without weakness. Now, this effort to reproduce the impression received at a given time under certain circumstances by a scene or a person may result in very fine work, or, on the other hand, may degenerate into slip-slop cant and pretentiousness. In the case of some of the French Impressionists I am afraid this is already the case. The difficulty also is that the eye of the artist and the spectator may so vary that the impression given by identical objects may vary considerably, and Impressionism ought not to mean eccentricity for eccentricity's sake, still less ought it to mean a series of tricks and mannerisms. I remember some years ago a small group of young artists who thought they gave breadth and strength to their work by a lavish use of the palette knife, and most unpleasant the effect was of the smeared canvas. Finally, if the spectator wishes to do justice to artists of this school, he must divest himself of all preconceived ideas, and place himself before their pictures trying to recall how similar scenes appeared to himself, not how he has seen them painted. The public so often get into the habit of looking through the spectacles of their favourite painters that they are very apt to do great injustice to any new school who attempt to go to nature

direct and learn their own methods from her. Let us hope that on the one side the young artists of the new school (if I may use such a term of artists many of them working apart from and unknown to each other) may religiously avoid cant, affectation, and a lazy habit of chancing effects; and on the other side, that the public will recognise in a discriminating but a generous way any conscientious endeavour to interpret on canvas, by however novel a method, the manifold and inexhaustible beauties of nature.

## THE HAWICK TOWN HALL COMPETITION.

SOME letters have appeared in the *Hawick Advertiser* upon the competition for the town hall. The following from Mr. Honeyman disposes of the objections which have been raised against his decision:—

It was inevitable that my report on the new town hall designs should give rise to a good deal of dissatisfaction, and I feel grateful to dissatisfied correspondents that while they state very plainly their objections to my recommendations they at all events give me credit for good intentions. So far, indeed, as I am personally concerned, I might very well refrain from taking any notice of their remarks; but this, I think, would hardly be right, because on the one hand I feel bound to satisfy competitors by every means in my power that I have acted fairly to them, and on the other to correct the false and misleading opinions of such correspondents as "Pro Bono Publico," "One who wants a good Town Hall," and others who seem utterly to have lost sight of the fact that there can be no such thing as fair competition where the published conditions are violated. I do not believe these writers wish to mislead, and I am quite sure the people of Hawick wish to act justly, and therefore, with your permission, I desire to show the unfair tendency of suggestions which have been made, and by a simple illustration to bring out the principle involved. Let us suppose that at one of your district agricultural shows Hawick has offered three prizes for two-year-olds, and that when the animals are brought into the ring it is discovered that a lot of breeders have tried to pass off three-year-olds as two-year-olds—what I ask would be thought of the judge who would hesitate for a moment about turning them all out? If only one beast of the class of two-year-olds was left for him to pinch and poke, and he found it all right he would give it the first prize of course, but what would he do with the other two prizes? Will "Pro Bono Publico" or any good man of Hawick tell me that he ought to tie the second and third prize tickets to the horns of the likeliest three-year-olds and let them be led about after the two year-olds? I would be glad to have a plain answer to that question. Again, would any of my friends propose that the difficulty should be got over by altering the conditions, which had been duly advertised, after the animals were in the show-yard? Or, what would they say to this expedient—that the committee should not appoint a qualified judge at all, but leave the selection to a shoemaker or a painter who had never been in a byre in his life, and tell him just to give the prizes to the biggest and best-looking beasts in the lot? That is another question which should be susceptible of a plain answer. Of course such a gross miscarriage of justice is impossible in the case of bovine competitions, and it is fortunately becoming less common than it used to be in the case of architectural competitions, and I trust the people of Hawick will set their faces against anything of the kind. It is worse to class a 12,000*l.* design with one at 8,000*l.* than to class a three-year-old with a two-year-old; and if a mistake has been made, if it is the bigger class of animal they wish to bring together, the straightforward course clearly is to advertise that at the next show the Hawick prizes will be for three-year-olds; and then you may depend upon it when the show comes round there will be no need to turn out any younger beasts. In your editorial remarks you point to the true origin of the present difficulty—the smallness of the sum to which competitors were limited; but it must not be forgotten that *they were so limited*, and any change of opinion on this subject now cannot possibly affect this essential condition of the present competition. What I have already said may serve to answer some of your correspondents who were competitors. It must be evident that if their designs were disqualified they could not be either premiated or exhibited—they are, in fact, placed outside of this competition altogether; and the responsibility of placing them there rests upon me. Now, so far as the probable cost is concerned, I freely admit that there is room for considerable diversity of opinion; and I can only say that I have given competitors the benefit of any doubt I had about the cost of their designs, and that I had every disposition to "stretch a point" in the circumstances. But manifestly stretching a point is not stretching two points. The line must be drawn somewhere. It is not usual, and I think it is not right that it should be drawn out much beyond 10 per cent.; and even your correspondent "Logic" may be able to comprehend that it is possible to "approach" such a margin and yet to remain outside of it. But some competitors maintain that their designs would cost less than the one which has been premiated. Mr. Fairley, in his letter to the town council, is very explicit on this point. I believe him to be wrong, but trust he may have every facility for



ascertaining whether that is so or not. I took great pains with the cubing of the designs and with the pricing of them after they were cubed, but my brethren may rest assured that I would much rather be convicted of inaccuracy than of injustice, and that I would welcome any accurate information which might lead me even yet to name designs entitled to the second and third premiums. I have every reason to believe that the town council would entertain any such recommendation favourably, and I regret to think that there is little likelihood that I shall be in a position to make it.

## BIRMINGHAM ARCHITECTURAL ASSOCIATION.

ON Saturday last this Association took an archæological ramble. Amongst the members present were Messrs. F. E. F. Bailey, Norman Gething, V. Scruton, and Franklin Cross (hon. secretary). The historical hills visited brought to mind many interesting events which have happened in the neighbourhood, especially the severe encounters which took place between the ancient Britains and the Romans; for on Clent and the neighbouring heights the Britons under Caractacus were defeated. Tumuli were erected in numerous places, and are visible and well worthy of inspection. During the afternoon the church of St. Clement at Clent was visited, and also the ancient and beautiful little chapel dedicated to the murdered infant King Kenelm. The situation of this chapel is remarkably picturesque, it being built over a ravine. At the east end was formerly a well which attracted thither pilgrims from all parts of the country, so great was the reputation of the water for its efficacy in the cure of various diseases. At the time of the Reformation the well was destroyed, and Bishop Latimer used every exertion to discourage the resort thither of pilgrims. After dining together at Hagley the members returned by train to Birmingham.

## PANAMA.

THE following description of Panama has been prepared by Acting Consul Chamberlain:—

Panama has increased in population since the establishment of the Interoceanic Canal Company. There are now in Panama and its immediate suburbs over 20,000 inhabitants according to last year's census. There is a village just being finished outside the town called Pueblo Nuevo, where a mixed population of West Indians and Colombians reside. Along the line of the canal there are about 6,000 British subjects, and at Colon they are fully 4,000 to 5,000. Panama, with the villages on the line and Colon, musters a population of 36,000 souls, of whom half that number are of British nationality. The town itself has not much benefited by the increase. The four public squares—Cathedral, St. Anne, Triumph, and St. Francis—have not improved in appearance. The Cathedral square is formed to the north by the bishop's palace, on the south by the Canal Company's offices, and on the east and west by private residences. The main street, running direct east and west, passes through the Cathedral square. The other squares have no particular public or private edifices worth mentioning. The few there are, such as convents and churches, are in a state of ruin. The St. Anne square is reserved for feast days, where bull fighting and public amusements are indulged in. The streets are, as usual, in the same state and style as they were years ago—very inconvenient for those who are not accustomed to walk on angular stones. The buildings have no particular style of architecture; they are generally of stone, and no symmetry is observed in their mode of structure. The cathedral is the only building worthy of notice, being built in the time of the Spaniards, and dates from 1760. It is in the Byzantine style, and its towers are covered with oyster shells (rough mother-of-pearl). Red tiles made of clay, and hardened by being exposed to a certain temperature, are used for roofing. A great many buildings are being constructed, owing to the great profits attached to house rent, which is exorbitant. A house containing six or seven rooms is let for 20*l.* per month; a simple furnished room cannot be obtained for less than 6*l.* The drainage is very imperfect, and the sanitary condition of the town is only preserved by the torrents of rain which take place during seven months of the year. These rains, which occur nearly every day during the wet season (April to November), sweep away all the offal of the streets, and cleanse both the drains and the streets during these months; regular streams run down the streets and carry all before them into the sea. The town is admirably constructed for these deluges to have effect, the city being partly on a tongue of coral and basaltic rock stretching out into the sea, and partly on a gentle rise towards the Mount Ancon. When the rain falls these artificial rivers take their sources from the sides of the mountain, descend impetuously to the middle of the town, where the water divides itself into the several streets and lanes, and empties itself on each side of the spit. These rains not only are beneficial in acting as a municipality, but supply the population with water. The first falls are not generally gathered for drinking, as they sweep from the house-tops dust, dirt, and decayed vegetable matter. Panama in the dry

season has no water. It is brought from sources and rivulets miles away from the town in water-casks, where the vendors make a handsome profit. The rivulet which supplies Panama with water is called Matasnillo. Three buckets are generally sold for 6*d.* It costs a family 4*s.* or 5*s.* per day for this element during the dry season. Nearly all the wells are dried up and the cisterns exhausted at the end of January, so the inhabitants during February and March are obliged to purchase water. A most extraordinary phenomenon occurred on March 8 of the present year. There were two wells in Panama, which boasted of their perennial source, graciously employed in supplying water to the inhabitants of the town. On the above date we had a very sharp shock of earthquake, which lasted 25 seconds; the owners of the wells were surprised the next morning to find their wells completely dry, the earth itself at the bottom of the wells being found to be hard and apparently parched.

The climate of Panama during the dry season (December to April) enjoys a steady and equal temperature of 27 to 29 centigrade. During the wet season (April to November) the heat is very oppressive, owing to the great dampness of the atmosphere, and the want of breezes. Light southerly winds prevail during the wet months, and strong northerly trade winds during the day. A singular coincidence to be remarked at Panama is that the winds during the dry season fall and rise with the tide. This phenomenon also takes place with the wet season, where, at low tide, there is scarcely a breath of air. The showers generally fall at this moment, preceded by heavy storms of thunder and lightning. The air is charged with electricity, and heavy rain-clouds hang over the Isthmus, which melt in heavy showers as soon as the electricity is discharged in the form of fork and sheet lightning. Within my recollection I have seen buildings struck by lightning; the towers of the cathedral were struck last year, and several large masses of stone were detached by the stroke. Notwithstanding the frequency of these accidents from lightning, there is not a single lightning conductor in the whole town. The railway wharf received a discharge in October last, which tore up and splintered several planks. Three people were killed on the Savanna.

The Isthmus is covered with thick vegetation; the wonderful verdure grows pell-mell; the variety and luxuriance are marvellous. Great trees overshadow an interminable and impenetrable jungle of lesser growth, made up of an endless number of nameless plants and vines, all pushing, struggling, clambering towards the light. The flora is perfectly gorgeous and bewildering in beauty and variety. The solar rays cannot penetrate such layers of thick foliage, and the soil always remains saturated. Emanations and effluvia, which arise from the surface being deprived of the sun (who extracts dampness and destroys decayed vegetable and organic matter), are the main cause of the various kinds of fevers in the country, such as yellow, typhus, malignant, remittent, and intermittent. The only specific used by medical men is quinine; the natives use a bitter tamarisk, of which they make a febrifuge. There were 130 lbs. of quinine used last year on the Isthmus, and valued at 3,000*l.*

Panama will become healthier when the city is provided with waterworks. A company has been lately formed, to whom a concession has been granted. Mr. Sosa is the engineer who holds the contract for the conducting of the water to the town, and the Franco-Trading Company have the principal shares, in conjunction with a New York firm. The works are to be constructed and handed over in two years (1885) at a cost of 50,000*l.* The water will be brought from the Rio Grande at a distance of about seven miles in iron pipes. This will be a remarkable improvement to Panama, and a great boon to its inhabitants. Gardens will be planted which could never exist before, owing to drought and expense of water in the dry season. The squares will be embellished and rendered pleasant. The dust will be laid, which is most disagreeable in the dry season, and causes, I am sure, the greater portion of diseases of the chest, which are so prevalent in this period of the year.

There are not many religions. Catholicism predominates. The Jews are numerous. There are no places of worship for any other denominations but Catholics. Protestants generally unite in some appointed place; so do the Jews. Neither of these denominations have any public buildings of worship. There is an assembly house, a presidential residence, a cathedral, a governor's office, and courts of justice. Both these latter are not very imposing structures.

There are several inns, but no really good hotels. There is only one passable, which is frequented by nearly all passengers in transit. A great many persons resident in Panama board at the hotels and live in furnished apartments. There are a few restaurants: one or two are very comfortable, but the remainder are of a very ordinary class. There are three main streets; the others are of no length or breadth, and are kept in indifferent repair. There is but one single road leading to the Savanna, about five miles in length. In the dry season the dust is suffocating, and in winter it becomes almost impassable from the lakes and mud. The Savanna is a large open plain, studded here and there with mounds and hillocks, on which are built *châlets*, where the Panamanian families resort during the dry season to obtain change of air. The great curse attached to this villagiate is the



coloradillas, small insects like a tick (*Pulex penetrans*), where they are found in myriads in the dry grass. They penetrate the skin and produce violent itching. The natives destroy the insect, and allay the irritation with frequent ablutions of camphorated spirit and tobacco-juice.

The only existing promenade in Panama is on the ramparts, which were built by the Spaniards in the 16th century at a cost of 16,000,000 dols. (3,200,000%). The ramparts are situated at the end of the spit on which the town is built. There is a paved road about 400 yards long which leads to the platform. At the end the height from the sea level is 40 feet, the breadth is 60 feet, and the length 200 feet, all constructed with solid granite. Underneath the ramparts is the prison in which convicts are lodged. It is a very damp, dark location, and the cells are not particularly large, nor are they clean. There is another prison on the square, St. Anne, where prisoners are also confined. It is somewhat similar to the former; there is little accommodation of any shape for the inmates, and the rooms are too crowded to be healthy. The smells, too, are not particularly sweet.

There is a good market in the middle of the town, where beef, tropical fruit (bananas, mangoes, plums, &c.), and vegetables can be purchased. Living is very expensive, and is on the same scale as rent. The fact of there being no smaller coin than 5 cents proves that all purchases must be in accordance. On account of there being no copper money, the smallest articles have to be paid for with silver. All silver coins circulate and are received in payment. Gold has a very heavy premium—18 per cent. for English, 24 per cent. for American, and 17 per cent. for French, on the value of the "sol" or "peso." It costs a family living modestly from 60*l.* to 80*l.* per month.

The Isthmus for 50 years was not visited by any phenomena such as earthquakes, &c.; very slight oscillations were felt, but nearly imperceptible to a great many. Lately we have had a succession. The first that took place after this long silence was on September 7 last, at 3.20 a.m. The city was roused by a severe oscillation from north to south, accompanied by a rumbling noise. The façade of the cathedral was destroyed, the columns and balconies of the Parliament House were thrown down, and several public and private edifices were rent. Since then we have had a series, varying in intensity, from three to five per month, and the extraordinary coincidence exists that they are regular and more severe at the new moon.

## MR. JOHN TENNIEL AND HIS CARTOONS.

THE following extracts taken from the current number of *Truth* may be of interest:—

The retirement of Richard Doyle from the staff of *Punch* was a great blow. Fortunately, however, Douglas Jerrold had been struck by the force and originality of the illustrations to a new edition of *Æsop's Fables* from the pencil of a young artist named Tenniel. At his suggestion Mark Lemon invited Mr. Tenniel to do some drawings for *Punch*, and though the early efforts of the new contributor were confined to initials, vignettes, and small cuts, he was soon promoted to more important work. John Leech found social subjects more congenial to his lively vein than political disquisitions, which often required to be treated seriously. There was a dignity and grace about the style of Mr. Tenniel which rendered him an effective substitute, and Leech readily gave him opportunities of developing his natural aptitude. After a while they dropped into the habit of doing the cartoons alternately week by week, until, by degrees, Mr. Tenniel almost monopolised that department. At Leech's death he assumed, as of right, the leading position on the paper, which he has since occupied. He is now the *doyen* of the *Punch* artists, and, with the single exception of Mr. Percival Leigh, who is one of the original literary contributors, he is the oldest member of the staff. Previous to this he had shown great promise, both as a painter and as a draughtsman. He had been an artist almost from his childhood, his skill in drawing having manifested itself in his earliest years. Born in London in 1820, he was educated privately in Kensington. He never studied art in the sense of having undergone a regular course of training. He qualified himself for admission to the Academy, and subsequently at odd times attended a "life" studio in Clipstone Street. Here he followed courses of lectures on anatomy, assisting in the dissections, and making drawings of them afterwards. When a boy of sixteen his first picture was exhibited in Suffolk Street, and was purchased by Tyrone Power, the actor. Later on he was a successful candidate in one of the cartoon competitions at Westminster, and painted a fresco in the Poet's Chamber. But though he had been fairly successful as an exhibitor, both in oil and water-colours, he had demonstrated by means of book illustrations that his forte lay in draughtsmanship. It is an open secret that the subjects for the weekly cartoons in *Punch* are selected and discussed at the weekly dinner of the staff, held every Wednesday; and the artist must often find his imaginative powers rather handicapped and circumscribed by the political exigencies of the hour.

The subject for the following week's picture having been

selected for him, or perhaps suggested by himself, he takes a day to turn it over in his mind, and on the morrow formulates his ideas on paper. He makes his drawing in pencil on the wood, and rarely fails to complete it at a single sitting. It is finished by the afternoon of the day on which he commences it, and it is sent off to the engraver's the same evening. He dispenses altogether with models, relying on his own intuitive knowledge and skill. He is of necessity a rapid worker, for it is never safe to tackle his subject till the last moment. A single day may change the political situation and upset the plans of the artist. The hardship of working at high pressure is that Mr. Tenniel's cartoons always run the risk of being spoiled in the process of engraving. The technical skill of the engraver leaves nothing to be desired, but the time at his disposal is barely sufficient to do justice to the drawings under ordinary circumstances; and if Mr. Tenniel's work is delayed by a few hours, or even if it is more elaborate than usual in its details, parts of it have to be omitted or cut away, to the great detriment of the original design. Another result of the system is that Mr. Tenniel can never enjoy the relaxation of a regular holiday, for, with the exception of a week or two some years ago, his drawings have appeared regularly week after week without intermission since 1851.

## LEGAL.

### Exeter County Court.

(Before Mr. J. GIFFARD, Judge.)

HEMS v. GAYE.

Mr. F. Orchard appeared for the plaintiff, and Mr. Sparkes for the defendant. Mr. Orchard said that the plaintiff was an ecclesiastical sculptor and carver of Exeter, and the defendant was formerly coroner at Newton Abbot, and now a county magistrate, and the claim was for 13*l.* 9*s.* 5*d.*, the balance due to Mr. Hems for the erection of a screen in Wolborough church in memory of the defendant's wife. In the month of January 1881, the plaintiff's tender was accepted for the work, and the screen was erected in a proper and workmanlike manner. The sum of 50*l.* had been paid on account, but the plaintiff had been unable to get the remainder of the money.—His Honour inquired if Mr. Hems was not a gentleman of some reputation? He remembered walking down the streets of Huddersfield and seeing a carving there by Hems, of Exeter.—Mr. Orchard replied that Mr. Hems executed work all over the world.—His Honour thought that if the claim was admitted, as it appeared to be, the balance must follow as a matter of course.—Mr. Sparkes contended that the contract had never been carried out, the work having been left in a very unworkmanlike and slovenly manner.—Mr. Orchard denied this, and said the 50*l.* was not paid for more than twelve months after the work was completed.—Mr. Sparkes said that the defendant had told Mr. Hems that the balance of the money would only be paid when the screen was put in a perfectly satisfactory state.—His Honour said that the question was whether the screen was in a satisfactory state. The payment appeared to have been made upon a distinct agreement that the screen should be put in proper condition, but it would be an admission of the claim if the money was paid unconditionally.—Mr. Orchard said that there was no such condition in Dr. Gaye's letter.—His Honour said that if the money was paid without any condition the liability would be admitted.—Mr. Orchard then read the letter, in which Dr. Gaye said that the balance should be paid when certain defects complained of were remedied.—His Honour thought that was a condition.—Mr. Orchard contended that the screen was erected in accordance with the tender.—His Honour: Will you submit it to any gentleman to settle?—Mr. Orchard: It is as it ought to have been done.—Mr. Sparkes said that he was perfectly willing to leave the question of whether the screen was properly completed to any gentleman of position His Honour would name; but he held letters in his hand from Mr. Hems, who declared that Dr. Gaye's only motive in defending this action was a fraudulent one, and that he wilfully retained the money.—His Honour: When people get into litigation they often lose their tempers and say what they don't mean.—Mr. Orchard said that the defendant went out of England for nearly two years, and as Mr. Hems could not get any money he was naturally a little angry.—His Honour: No doubt the expressions objected to will be withdrawn.—Mr. Orchard: Oh, yes.—His Honour suggested that the question of fact should be left to any architect of celebrity to decide.—Mr. Sparkes said that as Mr. Hems seemed to deny that he had made any charges, he should like to read the letters.—His Honour thought that the reading of correspondence rarely led to harmony.—Mr. Orchard said that the plaintiff only wanted his money; he was not angry.—Mr. Sparkes said that the balance had been paid into the hands of the defendant's agent, so that he had clearly no desire to keep it. The allegations of Mr. Hems, however, were most scandalous, and must be withdrawn.—His Honour: They are withdrawn, I understand.—Mr. Orchard: Yes.—His Honour said it appeared to be all shadow fighting, as



the money was there.—Mr. Sparkes said that the money had been ready for months and months, but the contract had not been completed. Dr. Gaye had been a county coroner for fifteen years, and was now one of the county magistrates, and he had no wish to deprive Mr. Hems of his money.—Mr. Orchard said that if there were any imputations of fraud of course the plaintiff willingly withdrew them; he had, perhaps, been a little angry, but he had no intention whatever of bringing any charges against Dr. Gaye.—His Honour: I do not for one moment believe the plaintiff meant anything by what he said.—Mr. Orchard said that the plaintiff had frequently applied for the money, but had been unable to get it.—Ultimately the case was referred to Mr. Ashworth, architect, to report to the Court whether the work was properly completed or not, and the Registrar said that he would appoint a day for the purpose.

## CHURCH BUILDING AND RESTORATION.

**Birmingham.**—On Monday the Right Rev. Dr. Ilsley, Bishop Auxiliary of the diocese of Birmingham, laid the foundation-stone of a new church, to be dedicated to St. Anne, in Alcester Street, Birmingham. The church is to be erected from designs prepared by Mr. Albert Vicars, 151 Strand, London, in the Early English style of architecture, and is in length 105 feet by 48 feet in width and 50 feet high, consisting of nave and two aisles with chapels at the extremities of the latter, dedicated respectively to the Blessed Virgin and the Sacred Heart. When finished the building will seat 600, and upon emergency accommodate 1,000 persons. The sacristies are well arranged, and there will be a very handsome tower and spire. The contractors are Messrs. Barker & Son, of Handsworth, Birmingham.

**Birmingham.**—Memorial-stones of a new chapel, Rocky Lane, Nechells, in connection with the Methodist Free Church, have been laid. The building, which was commenced about a month ago, is to accommodate between 500 and 600 persons, and is to occupy the site of the old chapel, pulled down a short time since, and a piece of adjoining land as well. It is designed in the Gothic style, and will cost about 3,000*l*. The architect is Mr. E. J. Lloyd, and the builders are Messrs. Sapcote & Sons.

**Edinburgh.**—A new Presbyterian church, situated in Viewforth Place, has been opened. On the right, at the corner of the two streets, is the tower, and to the left hand a smaller tower—each tower containing a staircase giving access to the front and side galleries. On the ground level, doors open from the towers into the aisles, so that there are six doors affording direct access to the church. The length of the building from front to back is 103 feet, and the width across transepts, 70 feet; across aisles, 64 feet; and from centre to centre of nave columns, 32 feet. In style the building is Gothic of an early French type, the square abacus being used throughout, and other details in keeping. The tower is 150 feet high, and maintains the character of the early French towers. The builder was Mr. John Souden, the work being carried out from the designs and under the general superintendence of Mr. J. Russell Walker, A.R.I.B.A. The estimated cost is about 7,500*l*.

**Leeds.**—The church of Holy Trinity, Leeds, has been reopened after restoration, in which a complete renovation of the interior arrangements has taken place. One of the chief features of the restoration has been the alteration of the Corinthian stone columns, five on each side of the nave, which support the cornice under ceiling and roof over church. The great height of the stone pedestals—3 feet square—upon which the moulded bases and columns stood, excluded nearly one half of the congregation from a view of the pulpit or any principal part of the east end. This obstruction was so objectionable, that although great reluctance was felt by the architect and restoration committee on account of structural difficulties and other reasons, some alteration and improvement was an absolute necessity. On account of the base being built in several stones, filled in with loose lime fillings, the old stonework has had to be cut out and new wrought circular stone shafts and moulded bases inserted, which has been most successfully done, without the slightest crack or fracture taking place in any part of the building. The alteration of these columns not only affords a much better view for the congregation, but has added to the proportional effect of the church. The restoration has been carried out from the designs and under the superintendence of Mr. Thomas Winn, architect, Park Lane, Leeds. The contractors for the works are: Bricklayers, masons, plasterers, and concreting, Messrs. Franks & Evans; joiners and carpenters, Craven & Umpleby; hot-water apparatus and ornamental railing, Messrs. Nelson & Son; painter and decorator, Mr. J. T. Pollard; new sunlights and plumbing, Mr. Joseph Lindley; lead, glazed cathedral glass windows, Mr. George Wilson; tiling, Mr. Robert Leason—all of Leeds. The brass lectern was supplied by Messrs. Jones & Willis, of London and Birmingham.

**Llangain.**—This parish church has been further beautified, painted tiles having been introduced in chancel. The subjects are taken from the Apostles' Creed, and are richly painted in colours upon an elaborate ornamental background of subdued tints, pro-

ducing a very pleasing effect. The whole has been designed and executed by Mr. Charles Evans, of Warwick Street, Regent Street, under the superintendence of Mr. R. J. Withers, architect.

**Malton.**—St. Michael's Church has just been reopened, after being restored at a cost of 2,500*l*. The unsightly north and south galleries have been removed, new roofs erected to nave and aisles, two new transepts erected, and the precincts of the church greatly improved by the demolition of a lot of old property which half buried the north side. Mr. Fowler Jones, of York and Malton, was the architect for the restoration.

**Neston.**—The corner-stone of a new Presbyterian church has been laid. The building will consist of nave, with north and south transepts. A narthex at the east end is approached by an open porch; on the north is a porch connected with the tower. The basement will be appropriated for school purposes; schools will hereafter be erected in the rear of the west end of the building. The design is Gothic, or the Early Decorated period. The material is of Yorkshire stone for walling, and Storeton stone for dressing. The ceiling will be waggon-headed. The architect is Mr. James Francis Doyle, and the contractors for the work are Messrs. Hughes & Stirling Booth.

**Newton Abbot.**—The old rood-loft staircase of Wolborough church has been opened out, and an ancient little window, discovered when the north wall of the church was pointed outside, and which has not been seen for some centuries from the interior, opened. During the past seventeen years the church, through judicious restoration, has been transformed from a dilapidated edifice into one of the most interesting in the neighbourhood. Between 2,000*l*. and 3,000*l*. has been expended on the work. Mr. Rowell, of Newton Abbot, was the architect.

**North Tynedale.**—A handsome tower and bell spire in the Early English style is being added to Birtley Church, North Tynedale, the gift of Mr. Geo. Wray, F.R.G.S., Leamington, Warwickshire, as a memorial to his late wife, formerly a resident in the parish. Mr. A. B. Plummer is the architect, and Mr. W. Welton, contractor. It is hoped that the repairs and restoration of the old Early Norman church itself will soon be able to be undertaken.

**Standlake.**—The ancient and interesting church at Standlake has just been restored. The work comprised the restoration of the south transept, the south aisle, south porch, and nave roof. Mr. Clapton Rolfe, of Oxford, is the architect.

**Towcester.**—The church of St. Lawrence has been reopened after restoration. Some years ago attention was bestowed on the chancel alone, a new arch being inserted, and a tile floor, new seats, and altar-rails added, besides general repairs being effected. The work of restoration has now been extended to the nave and its aisles, together with the aisles of the chancel. The work has been carried out by Mr. T. Heath, contractor, of Towcester and London, from the designs of Mr. J. L. Pearson, R.A. Mr. White acted as clerk of works.

**Walmersley.**—The new church of St. Saviour at Walmersley, near Bury, which has been rebuilt on a site adjoining that of the former structure, erected in 1838, is now completed. The church contains nearly 700 sittings, the cost of erection being about 5,000*l*., which sum will be increased by an additional 1,000*l*. when the tower is added. Messrs. Maxwell & Tuke, of Manchester and Bury, are the architects.

**York.**—The memorial-stones of a Wesleyan chapel, to be erected from the designs of Mr. Morley, architect, Bradford, have been laid. The building is to accommodate about 840 persons, and behind the body of the chapel will be four large class-rooms or vestries. The contractors for the work are as follows: Mr. Swalwell, Clarence Street, and Messrs. Naylor & Birch, Union Terrace, brickwork; Mr. Jno. Bellerby, York, painting; Mr. Jas. Deacon, Shipley, joinering; Mr. Geo. Thomson, Leeds, plumbing; Mr. Ben. Dixon, Bradford, plastering; and Messrs. Pycock & Son, Leeds, slating.

## NEW BUILDINGS.

**Greenfield.**—The old school in connection with St. Mary's Church, Greenfield, Yorks, having become inadequate to the requirements of the parish, new schools are in course of erection for the accommodation of 340 children, at a total cost of 2,200*l*. Mr. M. Robinson, of 19 Acresfield, Bolton, is the architect, and Mr. James Bourne and Messrs. Hewkin Bros., both of Greenfield, are the contractors for the stonework and the remainder of the trades respectively.

**Maldstone.**—The new Fever Hospital at Barming has been opened. The hospital consists of four distinct blocks. Two contain the wards, the third is to be devoted to administrative purposes, and the fourth is the disinfecting house and laundry, together with a mortuary, post-mortem room, and ambulance shed. The buildings are of red brick with Bath stone dressings and Aylesford tile roofs, and the walls have been erected in two thicknesses, with an air cavity between in order to insure dryness,



The administrative block includes dispensary, matron's room, kitchen, storerooms, &c., on the ground-floor, and accommodation for six nurses above, with a separate room for the matron. Each of the ward blocks, which are situated in the rear, and to the right and left respectively of the main building, being connected therewith with a covered passage open at the sides, contains accommodation for ten patients, one room being 36 feet by 24 feet, and the second 24 feet square. A nurse's room separates the two wards, and there are the necessary offices, with a separate bath-room. The fourth block is fitted with the disinfecting apparatus. Messrs. Hubert Bensted, Maidstone, and W. Leonard Grant, Sittingbourne, were the joint architects, and the builder was Mr. Avar.

**Reading.**—Temporary buildings have been erected in the Forbury, Reading, for the meeting of the Church Congress, providing in the hall accommodation for 3,000 persons. Thirteen thousand cubic feet of timber, 50,000 superficial feet of inch boarding, 40,000 feet of match boarding, 23,000 feet of roofing felt, 4,000 feet of glass,  $3\frac{1}{2}$  tons of iron, and two tons of nails and bolts have been used, the total weight of timber being about 400 tons, and 40 workmen have been employed in the work. Mr. T. Kingerlee, of Banbury, is the builder.

**Rothsay.**—A Temperance Institute is about to be built at Rothsay, Island of Bute, from plans by Mr. J. Russell Thomson, architect. It will contain restaurant, reading, writing, billiard, and recreation rooms, conference hall, &c. The total cost, including site, will be about 8,000*l.*, and is a free gift to the town by the trustees of the late Mr. Norman Stewart, of Virginia, U.S.A.

## GENERAL.

**Professor Roger Smith** has selected "The Column" as the subject of his public opening lecture at University College, London, and he proposes to consider that feature both from a constructive and an historical and artistic point of view. This lecture takes place on Wednesday, October 3, at six o'clock, and the classes commence the following Monday.

**The Directors of the Crystal Palace** have completed arrangements for holding an International Exhibition of Arts, Manufactures, Science, and Industry during 1884. It is intended that the exhibition should open on April 3, and close at the end of October.

**Mr. Matthew B. Jamieson**, assistant city surveyor, Aberdeen, has resigned his office, consequent on having received an appointment abroad.

**A Monument** is to be raised to the memory of Bishop Alfred Ollivant in Llandaff Cathedral. Mr. Armistead, the sculptor, has received the commission.

**A Marble Monument** has during the past week been erected in the south transept of St. Cuthbert's Church, Darlington, to the memory of the late Mr. R. H. Allan, from the designs of Mr. J. P. Pritchett, architect, of Darlington.

**The National Statue** voted by the Houses of Parliament for erection in Westminster Abbey to the memory of the late Lord Beaconsfield has been finished by Mr. J. E. Boehm, R.A., to whom the work was entrusted. The statue, which is about 7 feet in height, is made of the finest white Carrara marble, and stands on a marble pedestal.

**An Exhibition** of works by modern artists will be opened at Derby on Wednesday, October 3.

**A Design** by Mr. Black, of Falkirk, has been adopted for the new town hall at Grangemouth. A design by Messrs. Franie & Son, of Alloa, was second in the voting.

**Melrose Abbey** has been made more secure by the works in the nave, south aisle, and south transept, which have been carried out at the cost of the Duke of Buccleugh.

**The Annual Congress of the British Association** was opened on Wednesday at Southport.

**A Design** submitted in competition by Messrs. J. Whitehead & Sons, sculptors, of Rochester Row, Westminster, has been selected for a memorial proposed to be erected in the Coventry cemetery of the late J. Starley, inventor of the bicycle.

**The Premises in Bedfordbury** which were illustrated in the last number of *The Architect* have been built for Mr. William Powell.

**A Stone Pulpit** of Early English character, designed by Messrs. Medland & Son, architects, of Gloucester, has been erected in the church of St. Catherine, Gloucester.

**The Amsterdam Exhibition.**—Out of the awards at the Amsterdam Exhibition, Great Britain takes 19 diplomas of honour, 51 gold medals, 70 silver medals, 54 bronze medals, and 25 honourable mentions. Among them occur the names of Messrs. Doulton & Co., diploma of honour; Messrs. Chubb & Sons, gold medal;

Messrs. Kirby, Beard & Co., gold medal; Messrs. W. Woollams & Co., silver medal; Musgrave & Co., Belfast, silver medal; and Messrs. Clark, Bunnett & Co., bronze medal.

**Mr. Walter Tregellas** is engaged on a work entitled "Cornish Worthies," which will give sketches of notable Cornishmen and families. It is to be published in two volumes (octavo) by Mr. Elliot Stock.

**Among the Dozen Works** or more for which Mr. Ruskin said a little time ago he had materials on hand was "A General Description of the Geology and Botany of the Alps," in twenty-four volumes. It would seem that he purposes entrusting some of this work to one of his pupils, for his publisher announces as in the press, "An Account of the Limestone Alps of Savoy, by W. Gresham Collingwood, M.A., late scholar of University College, Oxford; edited, with a Preface, by Professor Ruskin."

**Miss Kate Greenaway** promises this year again to delight young folks with one of her coloured picture-books. Miss Greenaway's book is entitled "Little Ann." It contains some forty pictures, besides many minor illustrations. Messrs. Routledge & Sons are the publishers.

**The Castle of Cortachie**, one of the seats of Lord Airlie, part of which was destroyed by fire last week, was the original castle of Cortachie, erected by one of the Ogilvys of Clova, and Cortachie descended from Thomas, third son of Sir John Ogilvy, of Inverquhar, who deserted his clan at the battle of Arbroath, but the name of the baron by whom it was built and the date of erection are both unknown.

**The Lancashire and Cheshire Antiquarian Society** held its last summer meeting on Saturday last at Macclesfield, when the party visited Macclesfield Old Church, Old Hall, &c. At the restoration of the church in 1851 mural paintings supposed to have been executed in 1500 were discovered under the whitewash. Copies of the paintings have been preserved, but the originals have been destroyed.

**Plans** have been prepared for the erection of a new church at Cloughfold, in the parish of Newchurch-in-Rossendale. The cost is estimated at about 4,000*l.*

**The Middlewich Local Board**, at a special meeting held on September 12, unanimously agreed that Mr. Joseph Waring, engineer and surveyor, of Winsford, be instructed to prepare plans, estimates, &c., for supplying their district with water.

**At a Meeting** held in the Town hall, Aberdeen, on Saturday last, Mr. John Gray, of Spring Gardens Ironworks, and a member of the town council, intimated his intention to present to the city a building suitable for an art school, to be erected from plans submitted at the cost of over 5,000*l.* The site of this munificent gift is in School Hill, fronting Gordon's College, and contiguous to the public museum now being built.

**The First Commissioner of Works** has purchased the Edison electric plant which has been used in the House of Commons during the 103 nights of the past session. The success attending this experiment has induced Mr. Lefevre to adopt the light on a permanent footing, and a considerable extension of machinery is now being made by the Edison Company. Next session, therefore, not only the libraries and the dining-rooms of the House of Commons, but also the division lobbies, Ministers' rooms, and precincts of the House will be lighted by the Edison light.

**The Autumn Meeting** of the Iron and Steel Institute was opened at Middlesbrough on Tuesday.

**The Manchester Cathedral Restoration Fund** has reached 23,000*l.*, and it is expected that the whole of the north side of the nave will be completed by Christmas.

**The Lancaster County Magistrates**, at the annual general sessions just held, approved of a motion that a sum of 27,000*l.* should be raised to complete the buildings in connection with Prestwich Asylum, including the annexe, the farm buildings and gas-works, coal stores, workshops, night attendants' block, the mortuary in connection with the annexe, and the outbuildings for epileptics. It is expected that this sum will complete the undertaking, which will then have cost a total sum of 151,200*l.*—at the rate of 186*l.* per patient.

**Improved Middle-class Dwellings.**—By reference to our advertising columns, it will be found that the trustees of the St. Mary-le-Strand estate, situate in the Old Kent Road, are prepared to receive offers for a portion of their estate upon which to erect fifteen blocks of improved middle-class dwellings, each containing ten suites of apartments. Mr. Albert Vicars, of 151 Strand, is the architect. At the request of the Charity Commissioners, these dwellings are designed so as to meet the requirements of clerks and others of a similar class.

**At the Annual General Meeting** of the "Bee" Land and House Property Investment Company (Limited), held at the offices of the company, 111 Victoria Street, Westminster, S.W., on the 31st ult., a dividend at the rate of 10 per cent. per annum was declared, free of income-tax, a balance being carried forward equal to another 36½ per cent. upon the share capital.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, SEPTEMBER 22, 1883.

### TENDERS, ETC

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—  
"Contract Supplement to THE ARCHITECT."*

### TO AMERICAN SUBSCRIBERS.

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*To prevent the possibility of delay, and to enable the Post Office Order to be the more readily traced in the event of its miscarriage in transit, it is advisable in all cases to notify per following mail, the number, date, and location of the order.*

### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Puroses. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the

absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

**OLDHAM.**—Oct. 1.—Plans for Schools for the Union, to Accommodate 120 Boys, 120 Girls, and 60 Infants. The building to be a separate one, in an enclosed area, to contain three schoolrooms, dormitories, baths, kitchen, with cooking arrangements; dining-hall to hold 500 persons, to be arranged so as to be usable for religious service; and four sitting-rooms and four bedrooms for officers. Mr. J. W. Mellor, Oldham, Clerk to the Board.

### CONTRACTS OPEN.

**ASHTON-UNDER-LYNE.**—Sept. 22.—For Extensions to Business Premises. Messrs. T. D. & J. Lindley, Architects, Ashton-under-Lyne.

**BANGOR.**—Sept. 27.—For Works for Carrying-out the Craigdyon Sewerage Scheme. Mr. John Gill, Engineer, Bangor.

**BELFAST.**—Sept. 25.—For Building Drying Room and Dormitories. Mr. James C. Neeson, Acting Clerk of the Union, Belfast.

**BELFAST.**—Sept. 25.—For Building Shops and Dwelling-houses in Main and West Streets. Mr. John Boyd, Architect, 9 Donegall Square West, Belfast.

**BELFAST.**—Sept. 29.—For Construction of Reservoir, &c., for Supply of Water to Mill. Mr. W. Hastings, Victoria Hall, Belfast.

**BIRKENHEAD.**—Sept. 26.—For Laying Pipe Sewer. Mr. T. C. Thorburn, C.E., Borough Surveyor, Municipal Offices, 35 and 36 Hamilton Square, Birkenhead.

**BLACKBURN.**—Sept. 24.—For Building Goods Offices, &c. Plans at the Engineer's Office, Hunt's Bank, Manchester.

**BLACKBURN.**—Sept. 29.—For Building First Portion of St. Silas' Schools. Mr. J. Bintley, Architect, Kendal.

**BOWDON.**—Sept. 25.—For Construction of 600 yards of Brick Outfall Sewer, and Draining and Laying Out of Nine Acres of Land. Messrs. John Newton & Son, Carlton Buildings, Cooper Street, Manchester.

**BRIGHTON.**—Sept. 28.—For Extending the existing Groyne and Storm Water Outfall opposite the Old Steine and Constructing Promenades over. Mr. Philip C. Lockwood, Borough Surveyor, Town Hall, Brighton.

**BROMLEY.**—Oct. 5.—For Building Small Brick Bridge, &c. Mr. John Ladds, Architect, 4 Chapel Street, Bedford Row, W.C.

**CANTON.**—Sept. 22.—For Building Mission Chapel. Mr. J. P. Jones, Architect, Park Street, Cardiff.

**CATHAYS.**—Sept. 24.—For Building School Chapel. Mr. J. P. Jones, Architect, Park Street, Cardiff.

**COVENTRY.**—Sept. 26.—For Alterations to Premises, Little Park Street. Mr. W. W. Harris, Clerk to the Guardians, Coventry.

**CRAMLINGTON.**—Sept. 22.—For Building Twelve Houses. Mr. John Milburns, West Cramlington.

**DEWSBURY.**—Sept. 28.—For Erection of a House, Shop, Warehouse, Stables, and Outbuildings. Mr. Henry Holtom, Architect, Bond Street, Dewsbury.

**DUKINFIELD.**—For Laying Brick Sewers, &c. Mr. Wm. Spinks, Surveyor, Dukinfield.

**DUNDEE.**—Sept. 25.—For Construction of Relief Reservoir, &c. Mr. James Watson, Engineer, 7 Euclid Street, Dundee.

**FULBECK.**—Sept. 22.—For Building a Dwelling-house. Messrs. Charles Kirk & Sons, Architects, Sleaford.

**GRAVESEND.**—Sept. 28.—For Construction of Cesspools, Catchpits, &c., at Elliott Street and St. John's Road. The Surveyor, Milton Place, Gravesend.

**GUILTCROSS.**—Sept. 29.—For Rebuilding Wing and Alterations to Workhouse at Kenninghall. Mr. Edward Boardman, Architect, Queen Street, Norwich.

**HALIFAX.**—Sept. 22.—For Building Six Shops and Houses and Three Dwelling-houses, Haley Hill. Messrs. George Buckley & Sons, Architects, Waterhouse Street, Halifax.

**HALIFAX.**—Sept. 24.—For Building Warehouse, Stables, &c. Messrs. Petty & Ives, Architects, Waterhouse Street, Halifax.

**HANDSWORTH.**—Sept. 26.—For Sewering, Kerbing, &c., portion of Westminster Road. Mr. E. Kenworthy, Surveyor to the Board, Public Offices, Handsworth, Staffs.

**HEREFORD.**—Sept. 24.—For Laying, &c., Cast-iron Mains, with Hydrants, Air-valves, &c. Mr. John Parker, City Surveyor, Hereford.

**HUDDERSFIELD.**—Sept. 27.—For the Construction of a Tunnel and Works in Connection, and Erection of a Goods Warehouse. Drawings and Specifications at the Engineer's Office, Euston Station.

**HULL.**—Sept. 24.—For Building Cargo Warehouse of Timber at the Albert Dock. The Resident Engineer, Dock Office, Hull.

**KARACHI.**—Oct. 28.—For Supply of Cast-iron Pipes, Valves, Hydrants, &c., for Extension of the Karachi Waterworks. Messrs. F. P. Baker & Co, 6 Bond Court, Walbrook.

**KILMARNOCK.**—Sept. 29.—For Construction of Filter at the Waterworks, North Craig. Mr. R. Blackwood, Secretary, Water Company's Office, Mill Lane, Kilmar-nock.

**LARNE.**—Sept. 26.—For Works of Water Supply for Village of Glynn. Mr. W. Hay, Clerk of the Union, Larne.

**LEICESTER.**—Sept. 28.—For Construction of Storm-water Sewers in District between Granby Street and Wellington Street. Mr. J. Gordon, C.E., Borough Surveyor, Leicester.

**LEYLAND.**—Sept. 22.—For Laying Water Mains. Mr. John Westby, Clerk to the Local Board, Leyland.

**LLANELLY.**—Oct. 6.—For Supplying and Laying 5,000 yards of Stoneware Drainage Pipes, and Construction of necessary Branches, Street Gullies, Manholes, Ventilators, &c. Mr. Geo. Watkeys, Surveyor, Town Hall, Llanelly.

**LLANISHEN.**—Oct. 12.—For Construction of Large Storage Reservoir, including Embankments, Valve-well, Culverts, Gauge-basins, Overflow, By-channel, Road, Fencing, and other works.—Mr. J. A. B. Williams, Engineer, Queen's Chambers, Queen Street, Cardiff.

**LONG REACH, KENT.**—Sept. 29.—For Building Laundry and other Administrative Offices in connection with the Hospital Ships *Atlas* and *Castalia*. Messrs. H. Jarvis & Sons, 27 Trinity Square, S.E.

**LUDDENDEN.**—Sept. 29.—For Alterations to Booth Chapel. Messrs. George Buckley & Son, Architects, Waterhouse Street, Halifax.

**LYNBY.**—For Heating Lynby Church with Hot Water. The Rector, Lynby Rectory, Nottingham.



MIDDLESBROUGH.—Sept. 27.—For Building Board Schools in Victoria and Gretna Streets. Mr. W. H. Blesley, Architect, 1 Exchange Place, Middlesbrough.

MIDDLESBROUGH.—October 6.—For Construction of a Reservoir to hold 500,000 gallons, with Pipe Connections, Valves, &c. Mr. Mansergh, C.E., 3 Westminster Chambers, Victoria Street, S.W.

MIDDLESBROUGH.—Oct. 6.—For the Construction of a Reservoir to hold about 500,000 gallons, with the necessary Pipe Connections, Valves, Overflows, Washouts, &c. Mr. J. Mansergh, C.E., 3 Westminster Chambers, Victoria Street, S.W.

OBAN.—Oct. 6.—For Erection of Block of Buildings in Argyll Square. Messrs. Ross & Mackintosh, Architects, George Street, Oban.

OXFORD.—Sept. 25.—For Construction of Penstocks and other Works. The Borough Surveyor, East Street, Taunton.

OXFORD.—Sept. 24.—For Construction of Iron Roof, Columns and Girders, and for Cast-iron Socket Pipes and Special Pipe Castings, &c. Messrs. T. & C. Hawksley, 30 Great George Street, Westminster, S.W.

PLYMOUTH.—Sept. 26.—For Erections for the West of England Cattle Show. Mr. John B. Body, Old Town Chambers, Plymouth.

PONTARDAWE.—Sept. 25.—For Building Board School. Mr. D. Bevan Turberville, Solicitor, 4 Herbert Street, Pontardawe.

PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

RUMNEY.—Sept. 24.—For Building a Vicarage House. Messrs. Griffith & Corbett, Solicitors, Cardiff.

SHEFFIELD.—Sept. 29.—For Construction of Arches, Culverts, Retaining Walls, and Works for Road, Crooke's Moor Valley. Mr. E. Davidson, Borough Surveyor, Sheffield.

SOUTH SHIELDS.—Sept. 22.—For Construction of Sea-Water Baths. Mr. J. H. Morton, Architect, Fowler Street, South Shields.

SOUTHWICK.—Sept. 26.—For Drainage of the new Burial Ground at Southwick. Mr. J. C. Wilford, 17 Fawcett Street, Sunderland.

STAFFORD.—Sept. 24.—For Restoration of Tower and Building Transepts, St. Chad's Church. Mr. Robert Griffiths, Architect, Stafford.

STAVERTON.—Sept. 25.—For Repairs, &c., to New Inn. Messrs. John Ingman & Sons, Architects, Hazelwood Road, Northampton.

ST. ALBANS.—For Building Villa Residence, St. Peter's Park. Mr. T. Foster Woodman, Chequer Street, St. Albans.

STOURBRIDGE.—Oct. 8.—For Works of Sewerage. Mr. Harry Mills, Clerk to the Board, 118 High Street, Stourbridge.

SUNDERLAND.—Sept. 24.—For Cutting off and Removal of the Sheepfolds Quay Point; also for the Construction of 230 Lineal Feet of Quay in the River Wear. Mr. H. H. Wake, C.E., Engineer's Office, Commissioners' Quay, Sunderland.

TALLANTIRE.—Sept. 22.—For Works of Water Supply. Mr. John Musgrave, Court House Buildings, Cockermouth.

TORQUAY.—Sept. 29.—For Erection of Mansion, Stables, and Cottage at Shipway. Mr. E. H. Harbottle, Architect, Exeter.

TOTTENHAM.—Oct. 2.—For a Concrete Invert along the Line of the Moselle Brook, Broad Lane. Mr. De Pape, Engineer, Board's Offices, Coombes Croft House, High Road, Tottenham.

TREHERBERT.—Oct. 1.—For Building Wesleyan Chapel, Mr. W. L. Goldsworthy, Treherbert.

WALTHAMSTOW.—Sept. 25.—For Building School in Maynard Road. Mr. W. A. Longmore, 7 Great Alie Street, Whitechapel.

WANDSWORTH.—Sept. 28.—For Building Workhouse Mr. T. W. Aldwinckle, 2 East India Avenue, Leadenhall Street, E.C.

WHITBY.—Sept. 24.—For Building Two Semi-detached Villas, West Cliff Estate. Mr. H. Walker, Architect, West Cliff Estate Office, Whitby.

WHITCHURCH.—Sept. 24.—For Building Stable, Coach House, &c. Mr. John Hillary, Longparish, Hants.

WIDNES.—Sept. 26.—For Building Infectious Diseases Hospital. The Surveyor to the Local Board, Alford Street, Widnes.

WITHAM.—Sept. 23.—For Providing Water Mains at Chipping Hill, for a distance of about 315 yards. Mr. John Cook, Witham.

WORTHING.—For the Erection of a New Pier. Mr. Thos. Dermer, Managing Director, Public Works and Contract Company (Limited), 2 Victoria Mansions, Westminster, S.W.

## TENDERS.

## ADLINGTON.

For Erection of New Parish Church, Adlington. Messrs. T. D. BARRY & SON, Architects.  
WINNARD, Wigan (accepted).

## BEDFORD.

For Building Almshouses and Villas, to be Erected at Turvey, Bedfordshire, for Mr. James Barton. Mr. JOSEPH S. MOYE, Architect. Quantities by Mr. Arthur F. Wrightson.

	Almshouses.	Villas.
Hall, Beddall & Co. . . . .	£6,070 0 0	£3,197 0 0
Higgs & Hill . . . . .	5,699 0 0	2,988 0 0
Grover . . . . .	5,548 0 0	2,894 0 0
Lawrance & Sons . . . . .	5,430 0 0	2,990 0 0
Martin, Wells & Co. . . . .	5,200 0 0	2,900 0 0
Brown, Son & Blomfield . . . . .	4,755 0 0	2,645 0 0
FOSTER (accepted) . . . . .	4,619 0 0	2,506 0 0

For Roadway Bridge across the River Ouse at Bedford with North and South Approaches. Mr. JOHN J. WEBSTER, Engineer.

## Masonry, Brickwork, Earthwork, &amp;c.

Botterill, London . . . . .	£6,993 0 0
Young & Co., Pimlico . . . . .	5,620 0 0
Maynard & Cooke, 7 Victoria Street . . . . .	5,550 0 0
Moss, Liverpool . . . . .	5,064 0 0
Griffiths, Heathville . . . . .	5,018 9 8
Smart, Nottingham . . . . .	4,999 0 0
Cooke & Co., Battersea . . . . .	4,840 0 0
S. & M. Pattinson, Ruskington . . . . .	4,217 0 0
Smith, Newcastle-on-Tyne . . . . .	4,182 15 5
Nawill, Starch Green . . . . .	4,069 0 0
Ward, Leicester . . . . .	4,030 13 4
PILLING & Co., Manchester (accepted) . . . . .	3,657 18 3

## Ironwork.

Head, Wrightson & Co. . . . .	4,764 8 0
Bland & Sons . . . . .	4,477 7 6
Moss . . . . .	4,054 0 0
Eastwood, Swingle & Co. . . . .	3,956 13 1
Heenan & Woodhouse . . . . .	3,900 0 0
Handyside & Co. . . . .	3,836 4 6
Butler . . . . .	3,832 5 0
Smith . . . . .	3,750 0 0
Nawill . . . . .	3,571 0 0
Pilling & Co. . . . .	3,636 2 4
Richards & Sons . . . . .	3,564 7 0
Russell & Robinson . . . . .	3,529 2 5
Coalbrookdale Company . . . . .	3,499 19 0
Griffiths . . . . .	3,491 15 1
Gimson & Co. . . . .	3,446 19 6
Young & Co. . . . .	3,400 0 0
Maynard & Cooke . . . . .	3,200 0 0
Pattinson . . . . .	3,160 0 0
GODDARD & MASSRY (accepted) . . . . .	3,150 0 0

## BICKINGTON.

For Building Vicarage House, Bickington. Mr. R. MEDLEY FULFORD, A.R.I.B.A., Architect, Exeter.

Gibbard, Exeter . . . . .	£1,972 0 0
Blowey, Plymouth . . . . .	1,435 0 0
Foaden, Ashburton . . . . .	1,450 0 0
BEARNE, Newton (accepted) . . . . .	1,280 10 0
Tapner, Bovey . . . . .	1,272 0 0

## BURNHAM.

For the Construction of Works of Main Sewerage at Burnham, Essex, consisting of about 4,728 yards of 15-inch, 12-inch, 9-inch, and 6-inch Stoneware Pipe Sewers and Drains, together with Manholes, Lampholes, Ventilators, Flushing Tanks, Gullies, Settling and Filter Tanks, and other Works in connection therewith, for the Rural Sanitary Authority of the Maldon Union, Essex. Quantities supplied by the Surveyor, Mr. ALFRED B. BRADY, A.M.I.C.E.

Read, Burnham . . . . .	£2,798 0 0
Newman, Maldon . . . . .	2,584 10 0
Gozzett, Woodham Walter . . . . .	2,575 12 8
Cook, Bennett & Thew, Lowestoft . . . . .	2,510 0 0
Beeton, Hunstanton St. Edmunds . . . . .	2,495 10 0
Redhouse, Baldock . . . . .	2,386 0 0
Biagham, Headcorn . . . . .	2,319 11 4
J. W. & J. Neave, Stratford . . . . .	2,279 0 0
Colepeper, New Cross . . . . .	2,207 15 0
Wood, Chelmsford . . . . .	2,199 0 0
Trim, Horsham . . . . .	2,197 0 0
Smith, Newcastle-on-Tyne . . . . .	2,175 0 0
Catley, Lloyd Square, W.C. . . . .	2,160 0 0
Cardus, Acton . . . . .	2,124 0 0
Rayner, Bootle . . . . .	2,115 0 0
Woodham & Fry, Greenwich . . . . .	2,097 0 0
Matthews, Dover . . . . .	2,076 9 11
Nicholson, Southend . . . . .	2,072 0 0
Armstrong, Chiswick . . . . .	2,050 0 0
STEWART, Southend (accepted) . . . . .	2,009 7 2
Cowdery & Sons, Newent . . . . .	1,991 15 10
Surveyor's estimate . . . . .	2,078 0 0

## GRAVESEND.

For a New Malting, Gravesend, for Mr. F. A. Walker. Mr. ARTHUR KINDER, Architect, 11 Queen Victoria Street. Quantities by Mr. Howard, 6 Martin's Lane, Cannon Street.

Bunting, St. Ives . . . . .	£1,927 10 0
Suffie, Gravesend . . . . .	1,900 0 0
Blake, Gravesend . . . . .	1,888 0 0
ARCHER, Gravesend . . . . .	1,747 0 0
Avard, Maidstone . . . . .	1,703 0 0
* Accepted subject to omissions, reducing contract to . . . . .	1,489 0 0

## GREAT YARMOUTH.

For Sewage Works, Great Yarmouth. Mr. J. WM. COCKRILL, Borough Surveyor.

Downey & Son, Norwich . . . . .	£5,195 0 0
Greenwood, Sudbury . . . . .	4,996 0 0
Hoves, Yarmouth . . . . .	3,850 0 0
Botterill, London . . . . .	3,768 0 0
Cook, Bennett & Thew, Spalding . . . . .	3,690 0 0
Smith, Newcastle . . . . .	3,571 0 0
Bray, Yarmouth . . . . .	3,223 0 0
Hayward, Kestbourne . . . . .	2,773 0 0
WATL, Yarmouth (accepted) . . . . .	2,412 0 0

## HALLIWELL.

For the Erection of Two Dwelling-houses at Halliwell for Mr. Emmanuel Brown. Mr. M. ROBINSON, Architect, 19 Acresfield, Bolton.

Dougill, Bolton . . . . .	£454 7 6
Maginnis, Bolton . . . . .	453 0 0
Dobee & Sons, Bolton . . . . .	417 0 0
ROBERTS (accepted) . . . . .	414 14 11

## HAMPTON COURT.

For Alterations at the Carnarvon Castle Hotel and Railway Bar, Hampton Court, for Mr. T. E. Dunn. Mr. H. L. NEWTON, Architect, 27 Great George Street, S.W.

Stirling . . . . .	£298 10 0
WALKER (accepted) . . . . .	262 11 0
Wheatley & Sons . . . . .	252 0 0
More & Sons . . . . .	187 11 10

## Peuterson's Work.

## HEATH (accepted).

## Gas Fittings.

## WINN (accepted).

## LIVERPOOL.

For the Erection of Thirteen Blocks of Five-storey Dwellings, containing 273 Tenements (Liverpool Artisans' Dwellings), in accordance with plans prepared by Mr. CLEMENT DUNSCOMB, M.A., M.Inst.C.E., City Engineer of Liverpool. Quantities supplied by the Engineer. HUGHES & STIRLING (accepted) . . . . . £53,722 0 0

## LONDON.

For Gas Fittings at the Storey's Gate Public-house, for Mr. Manley. Mr. H. L. NEWTON, Architect, 27 Great George Street, S.W.

## WINN (accepted).

For Rebuilding the Horse and Groom Public-house, Westminster Bridge Road, for T. J. Sewell. Mr. H. L. NEWTON, Architect, 27 Great George Street, S.W.

BEALLE (accepted) . . . . . £12,127 0 0

For the Erection of a new Coffee Palace, Glengall Road, Cubitt Town, E. Mr. A. STANTON COOK, A.R.I.B.A., Architect, 14 Furnival's Inn, E.C. Quantities by Mr. R. Stark Wilkinson.

Little . . . . .	£1,431 0 0
Holland . . . . .	1,335 0 0
R. & E. Evans . . . . .	1,318 0 0
Kemp . . . . .	1,270 0 0
Dye . . . . .	1,260 0 0
Taylor . . . . .	1,239 0 0
Thompson & Tweed . . . . .	1,226 0 0
Stayner . . . . .	1,130 0 0

For Sundry Repairs to the vacant and other Houses of the Licensed Victuallers' Asylum, Old Kent Road. Mr. W. F. PORTER, Architect.

Bull, Westminster . . . . .	£172 0 0
Taylor, De Beauvoir Town . . . . .	160 0 0
Perkins, Great Titchfield Street . . . . .	153 0 0
Davey, King's Cross Road . . . . .	140 0 0
Cook, Stonecutter Street, E.C. . . . .	133 15 0
WYTHE, Dalston (accepted) . . . . .	132 6 0
Dearing & Son, Islington . . . . .	130 0 0
Wells, Paddington . . . . .	125 0 0
Dawes, Peckham . . . . .	117 8 0

The Committee accepted the tender of Mr. Wythe in consequence of his already having the Contract to execute the repairs and decorations in the Board Room, as announced in *The Architect* of September 1.

## MALVERN.

For Laying Sewer at the Chase, Great Malvern. Mr. D. MILLER, Surveyor.

Sefton, Quest Hills . . . . .	£165 0 0
Osborn, Great Malvern . . . . .	146 14 0
EVERAL, Great Malvern (accepted) . . . . .	142 0 0

## NEWTOWN.

For Laying Out and Planting the Newtown and Llan-wchalam Cemetery. Messrs. JONES & PARKER, Surveyors, Newtown.

Thomas, Liverpool . . . . .	£277 0 0
Porter, Oswestry . . . . .	376 10 0
EVANS, Llanymynech (accepted) . . . . .	345 8 0

## NOTTINGHAM.

For Sewering Streets.

Smart . . . . .	£340 15 2
Hopkin . . . . .	332 4 3
Thumbs . . . . .	326 10 4
Knight . . . . .	325 15 10
CORDON, jun. (accepted) . . . . .	285 10 0

## OXFORD.

For Construction of Filter Beds, Pure Water Tank, Engine House, and other Works, for the City Waterworks, Oxford.

## Brick.

Chamberlane . . . . .	£10,995 17 11
Hilton & Sons . . . . .	10,230 0 0
Hill & Co. . . . .	10,070 0 0
Smith . . . . .	9,685 0 0
Cook & Co. . . . .	9,275 0 0
Baines . . . . .	9,073 5 0
Moss . . . . .	8,610 19 0
Kingerlee . . . . .	8,059 11 10

## Stone.

Chamberlane . . . . .	£10,972 2 10
Hilton & Sons . . . . .	10,703 0 0
Hill & Co. . . . .	10,112 0 0
Baines . . . . .	9,612 10 0
Smith . . . . .	9,538 4 11
Kingerlee . . . . .	9,108 5 11
Cook & Co. . . . .	8,930 0 0
Moss . . . . .	8,523 15 2

The Tender of Mr. Moss was accepted at £8,732 19s.

## RAMSEY.

For Erection of a New Presbyterian Church and Schools, Ramsey. Messrs. T. D. BARRY & SON, Architects. BOYDE Bros. Ramsey (accepted).



RUNCORN.

For Erection of New Church in Greenway Road, Runcorn. Messrs. T. D. BARRY & SON, Architects. BECKETT, Hartford (accepted).

SOUTHPORT.

For Construction of Sewers, Southport. Mr. W. CRABTREE, Borough Surveyor.

Crossens District.

Rayner	£3,697	2	9
Fawkes Bros.	3,330	17	2
LOMAX (accepted)	2,916	13	3

Southbank Road.

Griffiths & Thomas	778	8	1
G. & J. Foote	725	14	8
Lomax	628	4	0
Fawkes Bros.	619	3	3
Smith	606	2	11
Rayner	604	1	1
G. & J. E. Read	589	11	6
Hayes	536	8	9
Bird	516	7	2
HEATH (accepted)	470	7	6
Turner & Sons	442	10	4
	378	14	3

Portland Street.

Griffiths & Thomas	1,542	13	6
Lomax	1,461	7	9
G. & J. Foote	1,298	8	8
Rayner	1,285	2	2
Fawkes Bros.	1,269	18	6
Hayes	1,206	3	10
G. & J. E. Read	978	0	2
Heath	975	14	6
Bird	918	5	1
ROBERTS & WATSON (accepted)	910	15	8
Turner & Sons	869	3	6
	827	19	8

Manchester Road.

G. & J. Foote	1,198	10	2
Smith	1,198	3	0
Fawkes Bros.	1,157	10	7
Woodhead	1,100	2	3
Lomax	1,102	18	6
Hayes	936	19	7
Willan	899	18	0
HEATH (accepted)	810	6	1

Kensington Road.

Rayner	991	0	3
Lomax	856	13	9
Smith	853	0	8
Fawkes Bros.	833	12	9
G. & J. Foote	818	15	10
Willan	697	17	0
Bird	681	7	3
Heath	629	8	6
ROBERTS & WATSON (recommended for acceptance)	618	13	11

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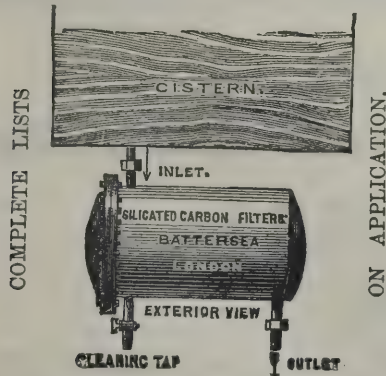
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For Repairing Quay, Store, &c., Hamworthy, Poole. Mr. JOHN ELFORD, Borough Surveyor.	
Johns & Guy	£67 10
Sharp	60 0 0
Knight	59 0 0
Habgood	52 0 0
Loader	50 0 0
GRAY (accepted)	49 0 0

SOUTHAMPTON.

For Making new Road and Executing Drainage Works (1,040 yards) in Banister's Park, Southampton	
Crook & Smith, Southampton	£1,645 0 0
Hayter, Portsmouth	1,644 0 0
Fanders, Southampton	1,585 0 0
Batt, Southampton	1,544 7 0
Pritchard, Sandown	1,468 10 2
Cowdery & Sons, Newent, Gloucestershire	1,395 0 0

SOUTHMINSTER.

For the Construction of certain Drainage Works at Southminster, Essex, for the Rural Sanitary Authority of the Maldon Union, consisting of about 1,649 feet of 9-inch and 6-inch Stoneware Pipe Drains, together with Manholes, Ventilators, Straining Tanks, and other Works in Connection therewith. Quantities supplied by the Surveyor, Mr. ALFRED B. BRADY, A.M.I.C.E.

Newman, Maldon	£165 0 0
Trimm, Horsham	149 0 0
Gozz. tt, Woodham Walter	145 0 0
Beeton, Hunstanton St. Edmunds	137 17 6
J. W. & J. NEAVE, Stratford (accepted)	137 10 0

STAPLETON.

For Laying Pipe Sewer, Ashley Down, Stapleton. Mr. J. HODDELL, Surveyor.	
Dare, Redland, Bristol	£384 0 0
CLARK, Fishponds (accepted)	195 0 0
Surveyor's estimate	180 0 0

STOURPORT.

For Alterations and Additions to Severn Valley Carpet Works, Stourport, for Mr. T. B. Worth. Mr. JOHN MOSSOP, A.R.I.B.A., Architect, Kidderminster. Quantities by Mr. Geo. Kenwick, of Birmingham.

Binnian & Son, Kidderminster	£2,050 0 0	Allowed for Old Materials.
Thompson, Kidderminster	1,864 0 0	50 0 0
Howard & Sons, Kidderminster	1,700 0 0	84 0 0
VALE, Stourport (accepted)	1,683 0 0	100 0 0

The work to be commenced at once, and finished before the winter.

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For Alterations to Bar, &c., at the Woodman Public-house, High Street, Sydenham, Kent, for Mr. G. T. CROCKFORD. Mr. HENRY ROBERTS, Architect and Surveyor, 113 Lewisham Road, S.E.

Cabinet, Bar Fittings, &c.

Sly, Greenwich	£360 0 0
Holloway, New Cross	360 0 0
Hubble & Trott, Deptford	368 0 0
Redman, Brockley	355 0 0
TAYLOR, Camberwell (accepted)	350 0 0

Pectering and Gas Fittings, &c.

Lane, Peckham	90 0 0
Banks & Co., Deptford (too late)	89 10 0
RUSE, Berzondsey (accepted)	84 10 0

TRANMERE.

For Additions to and Remodelling St. Barnabas Church, Tranmere. Messrs. T. D. BARRY & SON, Architects. BRATT, Rock Ferry (accepted).

For Additions to St. Paul's Church, Tranmere. Messrs. T. D. BARRY & SON, Architects. WILLETT, Rock Ferry (accepted).

WALTHAM HOLY CROSS

For the Supply and Erection of new Three-throw Ram Pumps, Waltham Holy Cross.

Wilson	£350 0 0
Pratchitt Bros.	349 0 0
Th. rnewil & Warham	317 7 6
Young & Co.	263 10 0
Merryweather & Son	251 10 0
Bramham & Co.	242 15 0
Naylor & Co.	239 10 0
WARNER & SON (accepted)	201 0 0

WIDNES.

For Main Sewerage Works (Contract No. 2), Widnes. Mr. W. W. COPLAND, Surveyor.

Rayner, Bootle	£8,955 8 8
Slinger, Cle-khraton	8,448 5 9
Cowdery, Newent	8,297 1 0
Evans & Lewin, Ditton	8,124 3 4
Williams & Jones, Rhyl	7,863 15 0
FAWKES BROS., Southport (accepted)	7,635 6 4
Cowburn, Hindley	7,437 0 0
Matthews, Widnes	7,218 17 3
Hirst, Widnes	7,195 4 10

WIMBLEDON.

For the Erection of a new Packing-room at the Wimbledon Sanitary Laundry, Cranbrook Road, Worpole Road, Wimbledon. Messrs. EBBETTS & COSE, Architects, Savoy House, 115 Strand, W.C., and Colchester. HARMER (accepted) £298 0 0

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# The Architect.

## THE DELIGHT OF THE EYE.



**O**f all the senses, that of sight, the most subtle and delicate, is the most enjoyable. The enjoyment of hearing, in the article of music, comes next in order, but it is enough to say that its cultivation is far more artificial, and indeed its pleasures almost entirely conventional. The diatonic scale itself is pronounced by philosophers to be a local custom; but the harmonies of colour and the melodies of form have been beautiful from the beginning and will be beautiful to the end. So also with the arts; although the musician and the elocutionist no doubt possess vast power over the emotions, it is power that is volatile and evanescent, while the painter, the sculptor, the architect, and the ornamentalist in a hundred varieties, seem to embrace in their domain everything in nature or in fancy and to utilise the whole universe in a perpetual and inexhaustible function of delight. The proposition is not at all too broad that nothing less than everything seen by man forms the subject of that intellectual pleasure which is the function of art; even the crankiest and crookedest of things, when they have quite ceased to be in nature anything but ugly, supplying to a certain quaint supplementary artificial sense of grace material for the picturesque.

Every great city ought to be made full of the delight of the eye. In the open country nature supplies abundance of such satisfaction, and one may go so far as to assert that the humblest toiler in the field, although often unconsciously, enjoys it well—missing it very much, for instance, when transplanted to the town, where the gauds of the gin-palace and the gas-lighted streets are the substitutes for the beauties of hill and dale, wood and stream, blue sky and cloud. Why is it, then, that our great cities, and alas! very particularly those of princely England, are not made full of the delights of the eye?

Probably the answer to this question is pretty clearly recognised everywhere to be something like this: that the town has for its *raison d'être* the cultivation of pure utilitarianism, the manufacture of goods, in short, and their distribution, and all else that comes of these proceedings. Labour of one wholly artificial sort or another is the business of towns, primarily, secondarily, and to a great degree in most cases, finally, and why vex the labourer with that which is incompatible with his work?

Stated thus in its unsophisticated severity, the argument may seem to defeat itself; but this is only because we are now happily awaking to a feeling of shame that such very hard lines should be laid down for human living and dying. We are beginning to feel a little ashamed of our "civilisation"; our political economy may be all quite clear, and its conclusions irresistible, and yet we begin to think there is something beyond political economy in the science of society, something that may not be very clear yet, but will become clearer by-and-by. One way of dealing with the difficulty is to ask this question—In all this artificiality of ours, do we not fail to complete the circle of artificiality? Amongst the rest, ought it not to be a principle of fair dealing (as we may call it) with humanity that the men who are thus withdrawn from the beauties of nature ought to be amply supplied with the beauties of art?

At the present season of the year it is the custom of the dwellers in our towns to migrate into the country for what is called, amongst other phrases, change of scene, and it seems to those who have occasion to observe such matters that every year this emigration is becoming more and more comprehensive. As affecting our present line of argument, may it not be suggested that change of scene is coming to be increasingly appreciated for this very reason, amongst others, that it is a change from the ugliness of ordinary town life to the beauty of country life? When children of metropolitan slums—born and bred in the narrow alleys of Drury Lane or Shoreditch—are taken out by local philanthropy to have "a

day in the country" for the first time, it is said they will lay themselves down upon the real grass in sheer rapture, and pluck real daisies or gaze into a real brook in amazement irrepressible; and what is this, in its degree, but the same sense of a hopeless artificiality of life which leads all who can by any means afford it to rush away from London now and then and lose themselves—in spite, perhaps, of no inconsiderable sacrifice of the comforts of home—in those simple delights of the eye which are, however simple, the most natural of all distractions?

It has been frequently remarked that in Paris—which is in many respects the best counterpart of London in the world—the people as a rule do not in this way seek relief in country expeditions. Like DICKENS'S tavern waiter in the City, whose enjoyment of the only holiday he had ever had consisted in helping the waiter of a neighbouring tavern, the true Parisian, when he takes a holiday, goes to see some other town, some other Paris. The reason for this, we should say, lies in the fact that Paris, no more artificial in its purposes than London, is so much more completely artificial in its results. The delight of the eye especially is an all-pervading element in the artificiality of that exquisite town, and the consequence is that the ordinary Parisian, except it be for some direct object of restoration to health, does not appear to require the same sort of change of scene which in English towns is so much in request. The motive here involved is a different one from that which leads people in Paris to get up their little family pleasure parties for the Champs Elysées, the Bois de Boulogne, or the forest of Fontainebleau. Their custom of living in the open air, even in the densest quarters of a town, is a national principle, a question of race, inherited from the east, just as the contrasted Anglo-Teutonic principle of avoiding the open air as much as possible is inherited from the north; and we may say almost with certainty that the enjoyment of a suburban picnic by a Parisian party from Belleville, compared with an excursion to Epping Forest by a family from Bethnal Green, is very much like the enjoyment of no more than an amplified boulevard compared with that of an excursion to Margate—nothing more than the acquisition of a little wider elbow-room in the one case, but a positive act of emigration in the other.

The fact is that the cultivation of the artistic delights of the eye must be said to be in England in a very backward state. One of the most peculiar differences in the world is that which distinguishes in this respect the English gentleman from the French. The same principle of dignity which on the one side of a narrow channel has always compelled men of patrician fortune to rejoice in the study of art for the sake of its pleasures, has led the same order of persons on the other side to regard everything of the sort with a suspicion of effeminacy and indeed of vulgarity. To this day, the aristocrat in France, even if not wealthy, is a *connoisseur* by nature, surrounding himself with the elegance and grace of all the arts as matter of course; while the typical English squire, in the midst of his broad acres, prefers to live in a crude and possibly shabby old house, filled, if with anything of value, with heirlooms more archæological than artistic, dressing himself like a superior groom or gamekeeper, and although one of the best fellows in the world and an excellent judge of a horse, a man, and perhaps a good song, professing no better opinion upon the mysteries of art than that the whole business is a pedantic affectation.

But it is matter for continual satisfaction that amongst the community at large that intelligent if vague appreciation of works of delineative, formative, and chromatic design, which is the forerunner of a vigorous artistic nationality, is clearly seen to be advancing steadily. The time is coming when English towns, even those which are now the most sordidly devoted to trade and toil, will be filled with the delights of the eye; and the mansions of the country gentry also, emulating the same spirit—as the churches of the country clergy have already so happily done almost everywhere—will be swept and garnished as the abodes of elegance and refined culture ought to be.

The absolute harmlessness, serenity, and virtue of those enjoyments of art which are received through the eye, it is sufficient to suggest without either description or argument. To be a supreme master in the production of artistic work is permitted to only one here and there; but to be successful imitators and followers is no more than a great many of us may joyously attempt; whilst to have an intelligent admiration for all that is done honestly, and a never-failing appreciation of all that is done well, is open to every one who will take a little



trouble to learn the simplest data of design. "A good eye," BURGESS used to say in his quaint way, "is the gift of the good GOD;" but we may add with even greater force that the commonest of eyes, if well used, may be made the means of more refined enjoyment than all the other senses together can afford.

## IN CLEVELAND WITH THE IRON AND STEEL INSTITUTE.

[BY A CORRESPONDENT.]

LAST autumn we accompanied the members of the Iron and Steel Institute in their excursion to the banks of the blue Danube, to Vienna and Buda Pesth, and to the very south of Hungary. This year they have chosen for their holiday gathering the banks of the Tees, silver now no longer, for Middlesbrough, that infant Hercules, "the youngest child of England's enterprise," has arisen upon its shores within the last fifty years.

The district of Cleveland—the cliff land, as CAMDEN derives the name—forms the "north-east shoulder of Yorkshire," and was before the Roman invasion inhabited by those "brave Brigantes" whose habit of "conveying" any "portable property" is supposed to have given rise to the word "brigands." WILLIAM THE CONQUEROR bestowed Cleveland on ROBERT DE BRUS, ancestor of ROBERT BRUCE, the "patriot king"; and the first record of Middlesbrough, now Middlesbrough, its chief town, is in the reign of HENRY I., when the same ROBERT DE BRUS gave a cell at this place to Whitby Abbey, on the condition that some Benedictine monks should be permitted to reside there. In 1808 there were only four farmhouses and a population of twenty-five; but "this piece of waste ground," as it was spoken of by an old chronicler, was so far improved by the opening of the Stockton and Darlington Railway, its subsequent extension to Middlesbrough, and especially the formation of a port by JOSEPH PEASE in 1829, with the later impetus of iron-mining and smelting, that at the last census in 1881 Middlesbrough had a population of 54,965, and possessed no less than 10,361 houses, with more handsome buildings than many places of its size.

The cell of Whitby Abbey, given by ROBERT DE BRUS, developed into a priory, some of the stones of which are built into the gable of the Middlesbrough Hotel. On the site of the graveyard, which was used until recently, the present church of St. Hilda was erected in 1840, after designs by J. & B. GREEN, of Newcastle. This, the parish church, was followed successively by St. John's, by Mr. NORTON, of London; St. Peter's, by Mr. W. H. BLESSLEY; St. Paul's, by Mr. JOHNSON, of Newcastle; and All Saints, by Mr. STREET. The railway station, mainly in Venetian Gothic, forms a great ornament to the town, having been erected by the North-Eastern Company at a cost of 150,000*l.* The town-hall, in the Early English style, from designs by Mr. HOSKINS, will cost more than 100,000*l.* The High School is a prominent object at the end of the Albert Road furthest from the railway station, having been provided by Sir JOSEPH WHITWELL PEASE, M.P., and partners, at a cost of nearly 20,000*l.* The neighbouring Albert Park, ninety acres in extent, was the princely gift of the late Mr. HENRY BOLCKOW, who paid 18,000*l.* for the ground, and spent 5,000*l.* in laying it out. This was opened by Prince ARTHUR in 1868; and in 1881, when Middlesbrough celebrated its jubilee, Lord FREDERICK CAVENDISH unveiled the statue to its benefactor, cast in bronze by Sir JOHN STEELL, after the work of D. W. STEVENSON, and erected near the Exchange referred to below. The Middlesbrough Estate of 500 acres, which was bought in 1830 for 30,000*l.*, has been considerably increased by reclamations from the banks of the Tees, and by upwards of 150 acres of marsh on the west. Building sites have more than tripled in value during the last twenty years, special lots obtaining very high prices; so that the motto of "Erimus," chosen by the corporation, has been fully justified.

Strangely enough, the iron trade did not originate with the extensive, if comparatively poor, iron deposits in the Cleveland hills, but was an imported industry encouraged by the shipping facilities, and by the presence of coal, if not on the spot, at any rate within a short distance. HENRY BOLCKOW, a German of remarkable energy and enterprise, and JOHN VAUGHAN settled at Middlesbrough in 1851, and started the first ironworks. Owing to a period of commercial depression

the firm nearly became swamped, when the discovery of ironstone at Eston, the existence of which had long been suspected, gave it a fresh start; and from that period success has gone on increasing until the present time, when BOLCKOW, VAUGHAN & Co. (Limited) turn out 5,000 tons of steel a week.

Middlesbrough is the cradle of the Iron and Steel Institute, which was founded in 1869 by some of its leading citizens, on the initiative of the late Mr. JOHN JONES; and it was here that the first annual provincial meeting was held. On returning to their home, after an interval of fourteen years, during which they have visited other centres of the iron manufacture, including those in Belgium, France, Germany, and Austria, the members find great progress, and what amounts to an industrial revolution. The BESSEMER process of steel-making, which depended on pure ores, has now been supplemented by that of THOMAS and GILCHRIST, so that it can now be applied to the Cleveland ores, largely impregnated with phosphorus; and half the output of the largest works in the world, those of BOLCKOW, VAUGHAN & Co., above mentioned, is derived from local oolitic ore, while the North-Eastern Steel Company have put up works especially for its treatment by these combined processes.

Some preface was necessary on the occasion; we are not, however, going to follow our metallurgical brethren through all the technicalities of their profession as discussed at the meeting, but only touch upon such subjects as we think will interest our readers. As the meeting of last year was essentially gay and joyous, so this was eminently sober and practical; and it was also strongly tinged with sadness owing to the disaster at the North-Eastern Steel Works, by which a newly-elected member lost his life, through the accidental overturning of a "ladleful" of molten metal.

Proceedings were commenced in the Oddfellows' Hall on Tuesday, September 18, Mr. BERNARD SAMUELSON, M.P., F.R.S., president of the society, occupying the chair; and the members were welcomed by Mr. CARL BOLCKOW, nephew and heir of Mr. HENRY BOLCKOW, and chairman of BOLCKOW, VAUGHAN & Co., Limited. The election of 60 new members was announced, bringing up to 135 the additions during the present year; and the BESSEMER gold medal of the Institute, which had been conferred on Mr. SYDNEY THOMAS, was received on his behalf, in his absence through illness, by Sir HENRY BESSEMER. Papers were read on new methods of making coke, by which all the gases, until lately wasted, are preserved, and all the valuable by-products recovered. These were so keenly discussed that they occupied the whole of the morning. After luncheon in the Drill Hall, on the invitation of the local ironmasters, the immense works of BOLCKOW, VAUGHAN & Co., covering 200 acres and employing 4,000 men, without including the iron mines and collieries, were inspected. A 30 cwt. steel ingot is rolled off at one heat into a bar 150 feet long, which is cut into four rails; and, as this immense bar would be otherwise difficult to manage, it rises on an inclined plane, so as to facilitate its subsequent passage through the rolling mill. The works are kept going day and night, being illuminated by the electric light on the BRUSH system.

On Wednesday the subject of cranes was first dealt with, being introduced by two papers, and calling forth an interesting speech from Sir HENRY BESSEMER. One member declared chains to be the curse of the engineer, while another defended their use, remarking that thousands upon thousands of tons were raised by their means every day. The next subject, and that which was perhaps the most warmly debated, was "hot blast stoves"; but the discussion was put a stop to, and the meeting adjourned on account of the sad accident mentioned above.

In the afternoon the party crossed the Tees, and visited the bore-holes that Messrs. BELL BROTHERS have undertaken for raising salt. An inspection of their furnaces and of the Anderston foundry, with the launch of a large iron vessel from Messrs. DIXON's yard, filled up the remainder of the afternoon; and the day's doings were brought to a close by the annual banquet of the Institute. This was held in the Middlesbrough Exchange, a magnificent building of 2,500 square feet area, the length of frontage in Marston Road being 178 feet, and that in Albert Road 130 feet. The 100*l.* prize for designs was awarded to Mr. C. J. ADAMS, as being the most suitable and as having the finest elevation, while the plans were capable of modification where alterations might be deemed necessary. The foundation-stone was laid in 1866 by



the late Mr. BOLCKOW ; and the building has been erected at a total cost, including site, of 30,000*l*.

On Thursday, the discussion begun on the previous day was concluded ; various complimentary votes of thanks were passed, and nearly 1,000*l*. subscribed for the widow and family of the unfortunate member who had been killed. The visitors then proceeded to Stockton-on-Tees, where they were entertained at luncheon in the Exchange Hall by the local iron-masters, subsequently visiting various works in the district. At the Thornaby ironworks of Messrs. W. WHITWELL & Co., the testing-house was decorated with the word "Welcome," wrought in T iron, underneath which was a grotto composed of coke, limestone, and iron ore, interspersed with ferns and containing a rabbit. The *raison d'être* of so apparently inappropriate an animal excited the curiosity of some of the party, when it turned out that the foreman had regarded it as mainly instrumental in the discovery of the ore, as it was in shooting rabbits on the Cleveland hills that the late Mr. VAUGHAN first made a near acquaintance with this valuable mineral.

In the evening the visitors were conveyed by North-Eastern Railway special train to Saltburn-on-the-Sea, the "child of the railway," as it has been called, and one of the newest of our seaside resorts. The iron-workers of Middlesbrough were in the habit of repairing on holidays to the "Ship" at Saltburn, to eat "fat rascals," a special kind of pastry for which the hostelry was noted ; and it occurred to some of the leading men of the district that this healthy and picturesque spot would serve admirably for a place of residence. Although 150 feet above the sea level, it is sheltered by hills from the east and north-east winds, while the surrounding district is noted for its grand scenery, varied with rocks and glens, bounding streams, and wood-clothed hills. The climate is dry and bracing, and the temperature is said to be remarkably equable. Again, the beach consists of sand, which is firm, dry, and trustworthy. Accordingly, the iron-masters formed the Saltburn Improvement Company, laid out the romantic pleasure gardens, and built the Zetland Hotel. This is a handsome free-stone structure, in the Italian style, with semicircular tower in the centre, the first stone of which was laid in 1861 by the late Earl of Zetland. A *fête* was arranged for the visitors in these gardens on the evening of Thursday, the band of the 5th Dragoon Guards being in attendance, and a magnificent display of fireworks having been prepared by Messrs. Brock, of the Crystal Palace.

Friday was devoted to excursions, the members, who mustered 500 strong, separating into three groups. The first, which was limited to a hundred, proceeded in a steamer down the Tees, to inspect the works undertaken for the improvement of the river by the Tees Conservancy Commissioners. This body has made a well-defined channel, increased the depth at

low water from 2 to 11 feet, and reclaimed 2,600 acres of land which will prove most valuable. These works have been carried out with 2,000,000 tons of blast-furnace slag, which has until lately been regarded as a waste product. Thanks, however, to the inventions of Mr. CHARLES WOOD, of Middlesbrough, slag is now formed into sand, which is used for mortar and also for making bricks and concrete. The Cleveland Slag-Working Company have laid concrete pavements on several of the footways of Middlesbrough ; and they form a hard, and yet not too smooth, uniform and durable path, which is certainly not secured by the Yorkshire flags. So pleased are the Yorkshire BRUSH Electric Light Company with this substance, which has been used for the walls and floor of their new works, that they have determined to adopt

the same construction in a projected extension. This company has been formed in Middlesbrough to supply several ironworks with the electric light from a single central station, and have already let the whole of the light they are able to produce with a forty-light Brush dynamo, representing eighty thousand standard candles. They supply five works as well as their own, on special contract, and hope soon to charge by meter for the light employed. It is worthy of note that they are able to work incandescent as well as arc lamps in the same circuit.

The second group went by North-Eastern special train to Darlington, the birth-place of the locomotive, where they visited that company's fine engine works, and were entertained at luncheon. Several other works were open for inspection, and a large portion of the party went on to Crook, in the South Durham coal-field, which is the most prolific in the whole world. The great point of interest was a bank of twenty-five SIMON-CARVÉS

coke ovens, erected by Messrs. PEASE and partners, the merits of which had been discussed at the meeting.

The third group visited the Cleveland iron-mining district, catching glimpses of some fine scenery on the way. The members left Middlesbrough by North-Eastern Railway special train at ten o'clock, passing historical Guisborough, or

Gisbro', great in woe.

Those tow'ring rocks, green hills, and spacious plains,  
Circled with wood, are Chaloner's domains ;  
A generous race, from Cambro-Griffin traced,  
Famed for fair maids and matrons wise and chaste.

Although the priory, founded in 1119 by ROBERT DE BRUS, has almost entirely disappeared, the isolated peak, Roseberry Topping, more than a thousand feet above the sea, forms a prominent object. The line passes Skelton-in-Cleveland, whose castle, with its "fayre hall and large towers," built by the first DE BRUS, is spoken of in the Cottham MSS. as "one of the jewels of this kingdom," but it was rebuilt in 1788.



MARTON HALL,



Shortly afterwards the railway edges Hutchcliffe, 4,000 feet above the sea, which lashes it below; and so appalling is the sight that some persons cannot be induced to travel by this line a second time. A glimpse is also obtained of Rawcliffe, 660 feet above the sea, and the highest cliff on the east coast; of Kilton valley, with the picturesque ruins of its venerable castle, built, it is supposed, in the reign of STEPHEN; and of the Skinningrove ravine, celebrated as having been one of the last strongholds of smuggling, and for the exploits of PAUL JONES.

Arrived at Loftus—mentioned in Domesday Book as *Loctsvm*, and so altered in name to distinguish it from Loft-house near York—the visitors proceeded to the Liverton mines, recently purchased by the Cargo Fleet Iron Company. Descending the shaft, they witnessed the boring of holes for blasting by machines invented by Mr. W. WALKER, the engineer. So rapid and effective in operation are these mechanical borers that a single one, aided by powder, which is used in a compressed form, will keep a blast furnace supplied with ore. Whereas the mine has hitherto been a losing concern, it is now made to pay well, thanks to these machines and the admirably laid-out surface works. Not a horse nor a locomotive is employed, but all the locomotion is effected by gravitation, lifts worked by stationary engines raising the trucks to the height necessary to give the incline. The ore and shale, as raised together from the mine, are received on an endless band, composed of steel links and plates travelling over rollers, on which the ore is separated from the shale as it travels along, the former being raked into railway waggons, and the latter tipping itself into smaller trucks, which discharge their contents automatically into a valley, thus being gradually filled up to make more ground. Luncheon in the schoolroom and a few complimentary speeches terminated the excursion.

The *bonne bouche* of the meeting, and one which recalled the gaiety of the Vienna gathering of last year, was, however, reserved for the last evening. This was the *conversazione* given by Mr. and Mrs. BOLCKOW at Marton Hall, which is, if not an ancient, at any rate one of the “stately homes of England.”

Marton Hall was begun in 1853 by the late Mr. BOLCKOW, on the site of a stately mansion erected by Major RUDD, which was burnt down in 1786. The plans of Herr GUSTAV MARTENS, of Kiel, were carried out by Mr. CHARLES ADAMS, of Stockton; and the present owner, Mr. CARL BOLCKOW, made further additions in 1874 and 1875, superintended by Mr. BLESSLEY, of Middlesbrough. The house is in the Renaissance style, and admirably adapted for internal comfort, as well as for displaying the rare works of art it contains. The large dome forms a conspicuous object from all parts of the surrounding country, and the portico is a splendid piece of art work, ornamented with sculpture in low relief. The house forms a fitting casket for the art treasures it contains, and which in value are surpassed by few collections in this country. The sketch of the building on the preceding page is taken from Mr. H. G. REID's interesting book on “Middlesbrough and its Jubilee.”

### PARIS NOTES.

THE new building destined for the reception of the library of the Ecole de Droit is now finished. It is absolutely distinct from the body of the school, and has a separate entrance in the Rue de Cujas. The principal room measures 56 feet by 24 feet, and there is a second 46 feet by 20 feet. The cost, including fitting-up, &c., has amounted to nearly 8,000*l.*, and the new library supplies a want long felt among students of the long robe, who had just reason to complain of the miserable accommodation hitherto afforded them in the small, low, and badly-lighted rooms formerly set apart for the library of the first school of law in France.

The work of enlarging the Mouffetard barracks, which, after those of the Rue de Lourcine, are the oldest in Paris, is to be commenced forthwith. The extension will take in the plot lying between the existing buildings and the Place Monge, in addition to another strip of ground belonging to the State, and running at right angles to the Rue Mouffetard and the Place Monge behind the houses of the Rue Neuve-Saint-Médard. When the alterations are completed the barracks will be isolated on three sides by

the construction of a new street from the Rue Mouffetard and the Place Monge. The total cost of the proposed extension is estimated at 2,500,240 frs. (100,000*l.*) The Caserne Mouffetard has been for upwards of fifty years the near neighbour of the celebrated Bal du Vieux-Chêne at No. 69 of the same street. For keeping order within and around these dancing-rooms, which for many years formed the favourite resort and rendezvous of scavengers, bullies, thieves, and other criminals, the services of quite an army of police and municipal guards had to be called into requisition every night. Happily for the peace of the quarter they were closed by order of the authorities in August of last year.

The Lille lottery, started, by special permission of the Government, for the purpose of raising the necessary money to erect a palace of fine arts at Lille, has just been drawn. 4,000,370 frs. worth of tickets were disposed of to the public; of this sum 1,650,000 frs. has been expended in prizes and expenses, thus leaving 2,350,370 frs., or upwards of 94,000*l.*, to be devoted to the aforesaid object. This is truly an easy and highly successful method of extracting money for artistic purposes from the pockets of the French people.

The paintings sent in to compete for the Troyon prize, which is awarded every two years, are now on exhibition in the western wing of the Institute. This prize was founded by Madame Troyon in memory of her son, the celebrated landscape painter, one of the conditions of entry being that the candidates must be Frenchmen under thirty years of age on January 1 of the year in which the concours takes place. The value of the prize thus offered for competition every other year is 1,500 frs., but as none was awarded in 1881, the winner this year receives 3,000 frs. In all, over thirty pictures are exhibited, the artists not being allowed to append their names, but only distinctive marks or mottoes, to their several works. As announced in last week's *Architect*, the subject given was *A team of oxen yoked to a waggon, guided by a driver, and descending a hollow forest road in early morning*, it being understood that the painting should contain no “figures” beyond those included in the above description. An inspection of the exhibits does not lead to a favourable opinion of their merits as a whole, and they can scarcely be classed as up to the average in such competitions. Some few of them, however, are good, and among these may be mentioned Nos. 15, 4, 5, 27 (taken in Cornwall), 16, 33, 22 and 29 (a bit seemingly from the Forest of Fontainebleau). The colouring of several is very curious, No. 28, in particular, affording an extraordinary view of a couple of positively scarlet oxen, led by a peasant in the bluest of costumes, down a lane which looks as though studied through an inverted telescope. The jury of the Académie des Beaux-Arts has awarded the prize to No. 29, a view in the Fontainebleau Forest, painted by M. Adolphe Marais, a pupil of MM. Busson & Berchère; a first mention being given to M. Henri Laurent, pupil of MM. Bin and Yvon; and a second mention to M. Paul Sain, pupil of MM. Guilbert d'Anelle and Gérôme.

The Minister of Public Instruction and Fine Arts has bestowed the Cross of Officer of the Legion d'Honneur upon M. Harpignies, the well-known landscape painter, and that of Knight of the same Order upon six other French artists, who exhibited works at the Amsterdam International Exhibition.

Four Austrian artists have just been decorated by the French Government. M. Hans Makart, the painter of the *Entry of Charles V. into Ghent*, has been promoted to the rank of Officer in the Legion d'Honneur; while MM. Angeli and Cavoň, painters, and M. Tilgner, sculptor, are made Knights of the Order. M. Makart, who is almost as well-known in Paris as in his native country, exhibits a portrait of the Comtesse Duchâtel in the present Triennial Salon, and M. Cavoň is chiefly known in France as the author of a fine portrait of the late Prince Impérial, executed at the command of the Empress Eugénie.

For some time past a vast thermal establishment has been in course of construction at Bourbon-l'Archambault (Département de l'Allier), at the expense of the State, from the plans and under the superintendence of M. Lecœur. It has been decided to decorate the grand pump-room as well as the great baths in ceramics, and for the execution of this work the choice of the Minister of Fine Arts has fallen upon M. L. Parvillée, admittedly one of the first ceramic artists in Europe.

The Paris Municipal Council has voted the sum of 20,000 frs. to provide for the expenses of ten representative working men to the International Exhibition at Boston. They will be elected by



the Chambres Syndicales, and the successful candidates, who will thus receive the substantial sum of 80*l.* apiece, are to leave Havre on board the *Amérique* of the Transatlantic Company towards the end of next week.

M. Alfred Bellet du Poisat, a painter of considerable merit, and pupil of Flandrin, died last week at the age of sixty. A great number of artists, including MM. Guillaume, Bouguereau, and Abadie, as official representatives of the Société des Artistes, attended the funeral of the deceased, which took place at the Church of the Trinity in Paris.

Among other Paris exhibitors at Amsterdam who have been nominated to the Legion d'Honneur are M. Quantin, the art publisher, and M. Rion, artist of the *Illustration* and *Monde Illustré*, who has illustrated the works of Scott, Mayne Reid, and Erckmann-Chatrion, and has contributed many drawings to the *Tour du Monde*.

A collection of original drawings by the celebrated painter Greuze, eighty-eight in number, has just been discovered in the library of the St. Petersburg Academy. They appear to have been purchased by Count Strogonoff when he was president of the Academy of Fine Arts, and remained there seventy years completely forgotten. The Grand Duke Vladimir Alexandrovitch, who now occupies that position, has given from his private purse a sufficient sum to permit the illustrated papers to reproduce them by photography.

The Museum of Decorative Art is now exhibiting in one of the rooms of Pavillon No. 7, at the Palais de l'Industrie, a bronze vase, 28 inches high and 3 feet in diameter, that the President of the Union Centrale des Arts has just received from Japan. The vase is the *shibashi* of an ancient temple, and a very remarkable specimen of Japanese art.

A M. Forney has lately bequeathed a considerable sum to the City of Paris for the creation of a library of works on industrial art. By the terms of the bequest, which will certainly be accepted by the Municipal Council, the treasures of the new institution are to be open to the inspection of artisans of both sexes, and will without doubt prove an acquisition to everyone connected with the most interesting branches of French industry.

### COLOUR HARMONY.\*

HARMONY of colour consists in the three colour sensations being equally excited, either jointly or separately, by all the colours of a composition, the mean, or general tone of which will consequently be some shade of white. It therefore appears only necessary to ascertain the relative proportions of the three fundamental colours in order to obtain a correct basis of harmony. The subject of colour, however, has two sides—the scientific and the artistic. Physicists have proved that the three primary sensations are scarlet, green, and violet, whilst most artists still support the old theory that the three primary pigments are crimson, yellow, and blue. It has therefore to be determined in the first place, which of the two sets is correct, or are both? Admitting that scarlet, green, and violet are the three primary sensations, because supported by Helmholtz, Tyndall, and, I think, by all modern physicists, we have to inquire upon what foundation the crimson, yellow, and blue theory rests, and what relation these colours bear to scarlet, green, and violet. We cannot obtain any of the colours of the primary pigments by mixture, but conversely almost all other colours are obtained from them. The particular hues of red, yellow, and blue, which mix best with the greatest number of other pigments, are a crimson red, a yellow neither green nor orange, and a blue of a greener hue than is often implied by that term. Crimson, yellow, and blue have therefore been named primary colours.

Each of these colours appears to have the power of exciting two primary sensations, and is therefore complimentary to green. Yellow excites scarlet and green, and is complimentary to violet. Blue excites green and violet, and is complimentary to scarlet. Colours approximating to the primary sensations may be obtained by combining two primary pigments. This relationship of the two sets proves that the primary colour sensations are equally excited in both sets.

It will be seen that harmony of colour being produced by scarlet, green, and violet, will also be produced by crimson, yellow, and blue, and that whether we adopt the scientific or the artistic theory as a basis for colour schemes, our results as to harmony will be the same—providing the pigments we employ are combined in a scientific manner, as colour. True combinations of colours,

as components of white light, can seldom be obtained in the ordinary way by mixing pigments together. One of the most convenient methods for colourists is by a rotating disc, on which the colours are placed. The disc is then revolved rapidly till the colours appear blended. By this means the following results are obtained: Scarlet and green produce yellow; scarlet and violet, light-crimson or pink; green and violet, blue; yellow and blue, grey. These results differ considerably from the colours generally obtained by mixture, and I think sufficiently prove the errors caused by combining colours as pigments, and not as components of white light.

Proportion in colour harmony is of much importance. Until recently the theory was that, dividing white light into sixteen parts, the proportions of yellow three, red five, blue eight, would be obtained; and no composition was considered harmonious unless these colours were present, either pure or combined, in these particular quantities. Professor Rood, however, in a work entitled "Modern Chromatics," gives an almost opposite hypothesis, and his calculations are especially valuable from the fact that, in addition to his being a professor of physics, he is also a practical artist, and therefore conversant with both sides of this subject. To go over his calculations would be tedious and occupy much time; but having abstracted crimson, yellow, and blue from some twelve colours he enumerates, I find that their proportions in white light are respectively about four, seven, five; quantities, especially as regards yellow and blue, almost the reverse of what they were formerly considered to be.

Colour harmony is sometimes divided into two parts. Chevreul divides it into harmony of contrast and harmony of analogy. Strictly speaking, there can be no such thing, in colour, as harmony of analogy, because all true harmonies, when reduced to their simplest form, contain the greatest possible contrasts. Chevreul subdivides analogy into three parts, and names them harmonies of scale, of hue, and of a dominant coloured light. The first is produced by different tones or shades of the same colour only being employed. Such a scheme, it is scarcely necessary to point out, would not be harmonious. The more saturated or intense the colour, the worse would be the effect, for any colour when lightened necessarily brings in a portion of the remaining colours, by which it is neutralised, with the white introduced—hence all light tones of colours are more or less satisfactory. Shades of a colour are also not displeasing from the fact that much of the colour is absorbed by the black. An instance of this so-called harmony was demonstrated a year or two ago in the adoption of very dull colours in decoration and dress. In such schemes proper harmony seldom existed, but discord was hidden by the introduction of so much black or grey. Chevreul's harmony of analogy of hue is produced by any colours of analogous tones or shades, and may therefore include colours which constitute true harmony. An analogous effect by a dominant colour, Chevreul's third harmony, results from one colour being added to all the others in the composition. It can, perhaps, best be realised by viewing a scheme through coloured glass; the colour of the glass seems to pervade everything. A deep red sunset scene is also an example, red being the dominant colour.

The prismatic image illustrates an analogous arrangement of harmonious colours. Beginning at the red end we have crimson, scarlet, orange, yellow, green, blue, and violet, with the most delicate hues between, so that where one begins or ends we cannot tell. All the contiguous colours, so to speak, are analogous, and yet the whole includes the greatest possible contrasts. It may, I think, be concluded that analogy is the method by which contrasting colours should be connected, and not placed in violent opposition, and in this sense may be included in the term harmony, but is incomplete in itself. Analogous colour schemes have lately been termed "tone harmonies," by modern colourists, owing to the late prevalence of dull tints—tints, in many cases, in which little colour is visible at all. The harmony, as the term implies, is of tone, and not of colour. Mr. C. W. Dempsey, in an article published about three years ago, stated that Mr. Morris, in decoration, and Mr. Whistler, in painting, were among the chief exponents of "tone harmonies," and the success achieved by them was well known. But Mr. Morris appears, to me, to be now more inclined to contrast, or at least, to more distinct and definite colour. Mr. Whistler seems as peculiar as ever, his recent "arrangement" being proof enough.\* In the article referred to, the two sides of colour—the science of colour and the art of colouring, and the technical meanings of the principal terms in both—are pointed out; these terms are harmony and melody. Harmony I have already defined, and Mr. Dempsey defines melody as "two or more colours in such juxtaposition that they form a part, or the whole of the prismatic spectrum, whether in their natural direct order or inverted." Melody, then, seems to be another term for the so-called harmony of analogy, and a better one, because it does not confound two meanings in one word, and is applied to the art of colouring, whereas harmony is applied to the science of colour. Both terms are compatible, for when harmony is obtained by melodious means our compositions are then perfect. It has been

\* From a paper read by Mr. G. H. Morton, jun., before the Literary and Philosophical Society of Liverpool.

\* "Arrangement in Yellow and White," Fine Art Society's Rooms, 1883.



argued that there are two schools of colourists. First, that of harmonious contrast; second, that of melodious intervals; but melody appears to be the proper manner of arranging harmonious colours, in the same way that harmonious notes are uninteresting till a melody is composed. Melody in one colour is to some extent similar to playing on one note.

This being the case, how is it that so many apparently in-harmonious compositions have been successful? There are many reasons, mostly unrecognised or unthought of. Many rooms have been decorated entirely in dull greens or blue greens, but contiguous rooms may be in hues of yellows and brown, consequently the two apartments together would be harmonious, separately melodious; indeed, our colour appreciation would be momentarily increased on passing from one room to the other. Then furniture and art objects generally bring in some contrasting colours. The chief cause, however, is due to the low key in which the large surfaces were coloured, the actual amount of pure colour being very small, the greater portion being grey in which the three primaries are present in harmonious proportion. It is seldom, perhaps never, that the three primary colours are absent in decoration, taken as a whole, and including carpets, furniture, everything. All in the room, and all that can be viewed out of the room, must be taken account of, as also the amount of light received into it, and the colour of that light. A room decorated in melodious tones of reds, in which no opposite colours were permitted, having a large window looking out upon a green lawn, might be strictly harmonious in daylight, though at night, when the green was shut out, the impression would doubtless be hot and oppressive. It would appear that the older colourists adopted harmony, the presence of the three primary colours, either pure or in combination, in certain relative proportions, as a rule not to be violated; but they often neglected the subtle melody by which means melodious harmony is most successfully arrived at. Hence their schemes are inclined to be crude and unrefined. The foundation upon which they worked, as to colour, but probably not as to proportion, was correct. They worked under the delusion that the contrast of pure primary and secondary colours, because harmonious, were beautiful; that bright red and bright green, or bright blue and bright orange, when contrasted, produced perfect composition. It is needless to say that such would be extremely vulgar, unless melodiously arranged either by tones or shades, or by those intermediate hues which would melodiously connect them, or by both. On the other hand, the tendency of modern colourists, of the so-called melodious school, is to neglect harmony, which should be the foundation of their ideas; mistaking the method for the fact, and producing effects at first pleasing, but eventually becoming tiresome and wearying. It may therefore be concluded that harmony and melody are essential in the art of colouring. The scientific fact that white light causes three principal colour sensations, all of which must be equally excited, otherwise the eye gets wearied and probably injured, must not be neglected. These three sensations are, as it were, the harmonious notes of colour, the art of composing them may be termed colour melody.

#### PAINTER-ETCHERS.

A CONVERSAZIONE was held at the Art Club, Liverpool, on Monday evening. A lecture was delivered during the evening by Mr. Seymour Haden, president of the Society of Painter-Etchers of London, on "The Relative Merits of Etching and Engraving as Fine Arts," his object being to bring about the restoration of that form of original engraving which was practised by the great masters of painting, who were their own engravers. This art, in his opinion, has entirely faded away, and become merged into that of mechanical engraving. In connection with the lecture there are several facts worthy of notice. The lecturer has been staying in Scotland; and in order to fulfil his promise he journeyed to London for his papers, and thence to Liverpool. From here he will immediately proceed to London, whence he will embark on board one of Sir Donald Currie's steamers for Madeira, at which place he will go on board *The Sunbeam*, on which Sir Thomas and Lady Brassey intend to go on a yachting expedition to the Canary and West Indian Islands. Dr. Haden was entertained at dinner by the members of the club, and in reply to the toast of his health alluded to his endeavours to popularise art in the surgery-room. As a medical teacher he had trained several eminent surgeons and distinguished physicians, who informed him they were greatly indebted for their professional success to the artistic training which he had given them. At the lecture the chair was taken by the president of the club, Mr. Robert Coltart, and Dr. Haden was accorded a warm reception. He said the object of the paper was not to contrast etching as a process with engraving as a process—the etched line with the engraved line—and to say of one that it was better as a form of art expression than the other; but to compare, without regard to the process employed or the person employing it, the practice of the painter-etcher, who was an original artist, with the practice of the modern engraver, who was not an original artist, thereby arriving at an intelligent con-

clusion as to the comparative claims of the two to be considered branches of "fine art." Nor could such inquiry be considered in any sense either impertinent or unnecessary, since etching, though an original art with a great history, was without representation in the Royal Academy, while engraving, which was not an original art, was fully represented there. If art was the brain impulse which it was assumed to be, it clearly followed that the first great fundamental principle of art must be personality—originality. Comparing the work of the older and modern engravers, it was clearly shown that while the etcher, under the influence of brain impulse and in the full exercise of his volition, engraved as he felt, and allowed himself as he did so the utmost latitude and variety of expression, the engraver, animated by no such impulses, was driven to express himself by signs and formulæ which, as art expressions, had no intelligible meaning. He respectfully submitted that this strange departure from all forms of natural representation on the part of the engraver, and his adoption in their place of a set of symbols which he learnt in his apprenticeship, could only be explained by the fact that his task was a mechanical one. Engraving being without personality, except such as may be supposed to be evolved in the art of copying or translating the work of another, originality and all the attributes which attended the exercise of the creative faculty were absent from it. Year after year, for now upwards of twenty-five years, original etchings and engravings, many of them destined to live when much of the mechanical steel-plate engraving of the day should have been forgotten, had been sent to the Academy, to be, if not turned out again, thrust into corners, and hung without order or distinction among what might be called the odds and ends of the exhibition. In no single instance during the whole of that time had the slightest notice or encouragement been given to any one of them, while the mechanical engraver—the adapter of other men's work to purely commercial purposes—had been accorded its fullest honours. The time surely had come when, on the simple ground that the material employed in art production had nothing to do with art, the etchers and the water-colour painters—now refused representation in the Royal Academy—might reasonably demand it. In the French Salon the art of engraving was divided into two classes—"L'eau forte" and "La Gravure"—and a distinct representation given to each. On what reasonable ground, therefore, did the Royal Academy refuse a distinct representation of this kind, for to do so was surely to remain behind the age. The question, however, after all, was not altogether what the Royal Academy, impenetrable in its irresponsibility, might or might not choose to accept as forms of art worthy of its encouragement, but which of the two existing forms of engraved art—that which was original or that which was not—had the most legitimate claim, outside the walls of the Academy, to be considered "fine art." At the close of the lecture a hearty vote of thanks was accorded to Dr. Haden for his interesting address.

#### ROSSETTI'S INFLUENCE ON ART.

THE first number of the *English Illustrated Magazine*, which is published by Messrs. Macmillan, contains an article on "Rossetti's Influence on Art," by the editor, Mr. J. Comyns Carr, which is illustrated by admirable reproductions of the artist's drawings. The following extracts will suggest the author's mode of treating his subject:—

At the age of thirty he had already in some sense refashioned the current ideals of English art, appropriating to its uses new stores of poetry and romance, and revealing by his own practice and example the secret by which the visions of the poet might be shaped to the service of pictorial design. This, indeed, constitutes his real claim to distinction, and it is here at last that we reach the true source of his influence over men whose minds were too seriously engaged to be deluded by any empty promise of the reality. The mere desire of ideal beauty would of itself have been no new thing in English art; for it must be allowed that the poetic ambition had haunted the spirit of many an English painter before the advent of Rossetti. Barry, Fuseli, West, Haydon, even Hilton—they had all been professors of the grand style, had all believed that it was possible to painting to begin again just where Raphael and Michael Angelo left off, and had all so far helped to discredit a cause to which some of them, at least, were passionately attached. It would have been late in the day to revive these hapless and hopeless experiments, nor could the attempt have won the support of a generation that had learned to recognise the supremacy of those English painters who had taken no part in the race for the ideal, but who had won a more enduring fame by simple reliance on nature. Between Reynolds and Barry, between Wilkie and Haydon, there is now no doubtful choice, and at a moment when the claims of realism were once more asserting themselves, any endeavour to revert to a style that was already stamped with failure would most surely have proved fatal to its author and disastrous to his cause.

Nor would such an endeavour have been consistent with the special character of Rossetti's genius. A truer perception of what was possible and needful for the art of his time led him to seek



inspiration in the work of those earlier schools of Europe where the realist and the poet still meet on equal terms, and wherein the exercise of the imaginative faculty leaves room for the faithful record of actual fact. To those who have not accustomed themselves to consider carefully the conditions which govern the processes of artistic degeneration and revival, there will appear to be something savouring of caprice in the enthusiasm with which the leaders of the præ-Raphaelite movement selected as models of style men whose work was confessedly immature. To pass by the crowning triumphs of the great schools of painting, and to revert to the tentative experiments of earlier workers who were only struggling towards the same goal, is like a wilful inversion of the true and natural order of things. And in the realm of science perhaps it might be so. But the ascending scale of scientific research in which the last note is always the highest note, has no counterpart in the history of art, least of all in that higher range of art which claims the closest alliance with the imaginative spirit, and is therefore fated to share its shifting fortunes. Here the onward movement of advancing power and accomplishment though it may seem for a while to be steadily maintained, is suddenly hurried forward by the force of individual genius to some triumph of unlooked-for splendour that discourages all hope of further progress. So it was, as we know, with the art of Italy at its crowning moment, and the very greatness of the men whose achievement closed a brilliant epoch is in itself a lasting hindrance to any direct transmission of their power. For, by the time that the forms of simple nature passing through the hands of a race of gifted artists, and receiving from each in turn some new impress of individual feeling, had at last taken the final stamp of Michael Angelo's mighty spirit, the issue, however noble in itself, could scarcely be turned to account by those who were seeking to regain the first principles of their craft. But the stream which had here grown to a torrent too broad to bridge and too deep to fathom might be tracked to a point nearer to its source: what has become complex and difficult in the art of Michael Angelo is told in simpler dialect by those who had gone before him; and it was, therefore, with a true sense of the high ambition of modern art, and a just estimate of its limited resources that Rossetti and those who were with him led the way to the earlier painters of Florence, in whom the love of beauty had been newly awakened, and whose utterances are always clear, even though they may not be complete. In all that they gave to the world the modest and yet passionate grasp of spiritual and material truth may well serve as an example and a warning to the artists of every school; for as their searching and quiet realism rebukes the confident audacity of later masters whose skill seems to boast a conquest over nature, so also and in equal degree their intense but reticent expression of emotional truth stands as an implied reproach against the laboured rhetoric of later art that would seek to adorn an idea over which the imagination has gained no real or complete control.

In reviewing the later paintings of Rossetti it is easy to perceive that he found it sometimes hard to exclude altogether from his view those tendencies of style against which at the outset of his career he had made the first and the stoutest protest. Something indeed of the change and development that has been noted in the wider history of art finds a reflex in the course of his individual practice. In the ten years immediately succeeding the period which ended with the production of the painting mentioned by Mr. Ruskin, his technical powers reached the highest point of proficiency in which they at any time attained. To these years belong the *Beata Beatrix*, *The Loving Cup*, *The Beloved*, the *Monna Vanna*, *The Blue Bower*, and the *Lady Lilith*. In the early part of the time he had produced the drawing of *Cassandra*, and the design for the frontispiece to "The Italian Poets," the water-colour drawings of *Paolo and Francesca*, and the *Heart of the Night*. It is the central period of Rossetti's career, a season wherein the earlier and the later ideals of his art meet and divide, and when he could command for the expression of both the fullest measure of technical resource. An unexampled richness and splendour of colour is the one quality that is common to the varied work of these ten years, and in this respect such pictures as the *Monna Vanna* and *The Beloved* are clearly distinguishable from all that had gone before and from all that followed. The pure, gem-like tints of his earlier painting had been fused and blended by a new sense of realism, but they had not yet been tarnished by the obscurity of tone that shrouds and shadows the work of later life. And this nearer approach to illusion in the treatment of colour is indicative of a deeper change in the spiritual direction of Rossetti's art. Gradually—at first, indeed almost imperceptibly—the individual qualities of the model gain a more complete ascendancy over his imagination. He begins to concentrate his forces upon the interpretation of distinct types of beauty, no longer using nature as the material out of which he might carve his own invention, but accepting what it offers as the determining motive of his work. A single comparison will serve to mark the significance of this change, and to illustrate its influence upon his design. The *Lady Lilith*, and the drawing for the frontispiece to "The Italian Poets," are both of about the same date. The latter was executed in 1863, and in the following year the same composition was utilised in the water-colour drawing of *The Rose Garden*. To the year 1864

belongs also the *Lady Lilith*, although the version here reproduced is from the replica in water-colour painted in 1867. But this agreement in point of time is manifestly consistent with a marked divergence of character, for as we contrast the two works we feel instinctively that the one belongs to the future of Rossetti's art and the other to the past. In the frontispiece to "The Italian Poets" the sentiment of design is still uppermost in the artist's mind; nature has been used and even carefully studied, as may be seen by a reference to the beautiful pencil drawing that accompanies the finished work, but it has been used to assist and confirm a settled and preconceived idea of poetical beauty. The *Lady Lilith*, on the contrary, starts from the conception of portraiture, and the ideal suggestion, whatever may be its force and fascination, only follows, and does not directly inspire, the reality. It has its own charm of sensuous and sumptuous beauty, uninjured as yet by the kind of exaggeration that overtook the painter in after years. It marks a period during which the contending forces of his earlier and his later style were held in equilibrium, and when his manner of painting combined in some degree the excellence of both. But even the great and brilliant qualities of such a work as this only serve to emphasise the adoption by the artist of an ideal in which his original gifts of poetical design were destined to hold a subordinate place.

If Rossetti had been content to accept the temper as well as the means that belong to realistic painting, this change in the direction of his art might not have affected its value. There are many men in art as in literature who only win the highest triumphs when they have rid themselves of the kind of poetic ambition that haunts the season of youth, and in its place have gained a keener insight into nature. Some of the noblest painting that remains to us is frankly founded upon the direct and simple observation either of the truths of human character or of the beauty of the outward world, and it therefore implies no reproach against a painter that he should elect in later life to put aside the fanciful ideals that had tempted the vision of a boy. But the course of Rossetti's art tells a different story. He was a poet to the end of his days, and though he might seek to divert the strong imaginative impulse with which he had set out upon his career, he could not escape its influence. And so in his case the change that came over his art was not healthful but hurtful; for the poet's vision, no longer finding for itself the earlier form of utterance, left him still unsatisfied with the kind of beauty that might have contented a different order of mind. The individual forms and faces that he chose to present did not now suffice for the purpose for which he sought to employ them. Unconsciously, perhaps, he began to force and exaggerate the reality he was no longer able to control, and it sometimes happened that the result was far removed alike from the intricate beauty of his early design and from the simplicity and truth of portraiture. This is not the place to attempt to examine the causes that may have led to these significant changes in Rossetti's painting; it is enough for our present purpose to note their effects. It is the penalty which natures such as his have to pay, that their art and their life are closely interwoven, and cannot by any means be divorced. From the first Rossetti had thrown himself wholly and passionately into his work, giving to it the best that was in him, and it is scarcely wonderful, therefore, that, with the failing health of later years, there should have come some evidence of a corresponding failure in the task that he had set himself to accomplish.

### ST. ALBANS CATHEDRAL.

THE new west front is now completed by the fixing of the crosses on the three porch gables, and the scaffolding will have disappeared in a few days. But there is still several months' work to do in the great central porch, which was found in worse condition than was expected; and two old features in it have been discovered of which no one was aware, and which Sir Edmund Beckett intends to restore. The restoration of the south side of the nave, beyond the part done under Sir G. Scott, has been begun, and is expected to take about a year. All the external stonework and the windows are completely dilapidated, and the vaulting of the aisle is cracked all over from the destruction of the cloisters which tended to support it. The windows on the north side are in very little better condition. The new west window is of the same width practically as those of York and Exeter and the famous east window of Carlisle, which all differ only by a few inches from 26 feet. The east window of Lincoln is the only one in either of the Decorated styles which materially exceeds it. The stonework of the tracing of this is nearly 3 feet deep from back to front. The width of the whole front is 105 feet above the plinths, and the height 109 feet to the top of the cross; the turrets, 93 feet.

Messrs. Thomas Lawrence & Son write: "The bricks used in the new premises in Bedford Street, Exeter (see your issue of last week), are better known as the 'T. L. B.' bricks, although made near Bracknell. We would also take this opportunity of calling special attention to the brick carving in these buildings, which is all done out of the 'T. L. B.' rubbers made by us."



## NOTES AND COMMENTS.

WE regret to announce the death of Mr. CHARLES REID, of the firm of Messrs. WARDROP & REID, architects, of Edinburgh, which occurred on Friday the 21st inst., and was the result of an accident. Mr. REID while walking, had approached, it is believed, the edge of the precipitous "Samson's Ribs" at Edinburgh, and on looking down, lost his balance, and fell to the ground below. Mr. REID was a native of Elgin, but he was professionally engaged in Edinburgh for many years, and, in conjunction with the late Mr. WARDROP, carried out many public and private buildings. He made a special study of Scottish domestic architecture.

MR. C. T. NEWTON, C.B., and his assistant Mr. C. H. SMITH, will deliver three courses of lectures at University College, London, upon Greek art. The first, by Mr. SMITH, will be on Greek Fictile Art, and will commence on October 5. The second course, to be delivered in January, will consist of seven lectures by Mr. NEWTON, on the sculptures and other ancient monuments from Lycia in the British Museum and the Museum of Vienna. In the third course, which will be commenced on May 2, there will be five lectures on the Greek myths, as represented on vase pictures and other works of art.

THE graphic method of determining strains has secured the approbation of Professor HENRICI. In the mathematical department of the British Association, at Southport, as in other places, he has recommended the adoption of the method in preference to the use of formulæ. Professor HENRICI says that an engineer who knows how to use the graphic method will employ no other, because it is impossible to find one which is simpler. If he were asked to give the formulæ to obtain stresses by calculation, the Professor said he should write them down from a sketch of the diagram, that being the simplest way of obtaining them. But it is necessary that the draughtsman should have a geometrical education, if he is to use graphical methods successfully. There is no doubt that formulæ in pocket-books have been used as if they were charms, and unless the mechanics of a beam are understood graphic devices will become a delusion.

THE prospectus of the classes at University College, London, has just been issued for the session of 1883-84. It will be seen that the department of Applied Science and Technology in this college opens on October 2, along with the rest of the college. The instruction in this department includes (1) lectures on different branches of civil and mechanical engineering and surveying and levelling, drawing and practical experimental work in the engineering laboratory; (2) lectures and practical laboratory work in electricity and allied branches of physics; (3) lectures in architecture and architectural construction; and (4) lectures and practical laboratory work in different branches of chemical technology, including brewing, heating and lighting, metallurgy, chemistry of the alkali trade, and agricultural chemistry. Besides these technical and professional lectures, the Faculty of Science provides very complete courses of lectures in mathematics, physics, chemistry, and geology—the sciences upon which the professional knowledge must be based.

PEOPLE in Sheffield are beginning to ask how it is that the enlargement of Mr. RUSKIN's museum is no nearer accomplishment now than it was eight years ago, and the reason appears to be that no one in particular takes an interest in the museum, to judge at least from some statements of Mrs. EMILY SWAN. That lady says that Mr. RUSKIN has himself superintended and had scaffolds erected around the Ducal Palace, Venice, to take casts of the sculpture; also from the cathedrals of Rouen and Amiens, the casts of which are in the storehouse of St. GEORGE, at Walkley. He keeps two artists constantly employed in making drawings from the best Continental examples of old masters' works. These drawings, that were done especially for the museum for the Sheffield people, are dispersed up and down the country. Many are at the White-lands College, Chelsea, waiting house-room at Sheffield. Mr. RUSKIN is eager to know what the people of Sheffield

are going to do before he begins to arrange his collection systematically. He wrote to Mrs. SWAN to say that he had "van loads more of books and things ready to come when there is a suitable home for them," and that he had enough material in his home at Brantwood, Coniston, to cover the whole of the Walkley Museum. He gave up his professorship at Oxford, and said he would give the rest of his life to teaching the people of Sheffield. The subscriptions amount in all to about 45%, and, if the funds continue to pour in at the same rate, the foundation-stone of an extension to the museum may possibly be laid in another decade of centuries. It is a pity that so much art wealth is unutilised. Many another town would gladly build, if Mr. RUSKIN would consent to move his treasures from unappreciative Sheffield.

THE Guion fleet of steamships has been enlarged by the addition of the *Oregon*, a steamer which is 520 feet long, 54 feet wide, 40 feet 9 inches deep, and has a tonnage of about 5,000 tons. As accommodation is provided for 542 passengers, the arrangements for ventilation must be proportionally effective. It was accordingly resolved by Mr. PEARCE, who constructed the vessel, that the BOYLE system should be adopted. The cabins, state-rooms, dining-rooms, and steerages are ventilated by means of twenty-six patent air-pump extracting ventilators and twenty patent down-casts. They are all of 24-inch diameter, with 12-inch pipes. By means of these appliances there can be no doubt that the travelling public will have all the sanitary comforts at sea that they can have in a well-arranged hotel on shore, and this is the principle which the owners of the fleet have constantly in view.

MR. BRUNLEES prepared some statistics for his address at Southport which suggest the revolution that was caused by the introduction of steel rails on English railways. In May 1862 steel rails were laid down experimentally at Chalk Farm Bridge, side by side with two ordinary iron rails, and after outlasting sixteen faces of the iron rails they were taken out in August 1865, the one face only which had been exposed during a period of more than three years to the enormous traffic amounting to something like 9,550,000 engines, trucks, &c., and 95,577,240 tons, although worn to the extent of little more than a quarter of an inch, even then appeared capable of enduring a good deal more work. Steel rails, however, were dear at that period, costing about double (12% 10s. per ton) as much as iron rails; therefore, although their advantages were manifest, they could not all at once replace iron. Now, owing to the improvements in the manufacture of steel rails, they can be produced as easily and as cheaply as iron rails. It was observed in 1876 that if, in order fully to realise the effect of the enduring quality of steel rails, a section were taken of the busiest portion of one of our leading railways, over which upwards of 7,000,000 tons of live and dead weight pass annually, it would be found that the life of a steel rail on that portion of the line would be forty-two years if the traffic remained the same. This would reduce the cost of maintaining the permanent way of railways from 210% to 106% per mile.

THE question whether green or blue is the national colour of Ireland has again come up for discussion, although it was long since determined by archæologists in favour of blue. Ireland, prior to the English invasion, was divided in petty principalities, each of which had its distinctive colour like the clans in Scotland at a later period. Saffron was a favourite colour for Irish dress, and the most obtuse would perceive that green could not harmonise with it so well as blue or crimson. It is the opinion of Sir BERNARD BURKE, the present Ulster King-of-Arms, that prior to the Anglo-Norman invasion there was not any one colour or banner adopted for Ireland at large, that none such is traceable in the old Celtic records or authorities now handed down by tradition, and none found mentioned in history; and Sir BERNARD BURKE says he is equally certain that since the introduction of English rule the national colour established by and derived from the national arms has been invariably blue. The field in the royal achievement which denotes Ireland is blue, and the colour adopted for the knights of St. PATRICK is blue. Indeed, it may be doubted whether green was much in use before the revolutionary movements of the last century.









Studied by M. Dupain.

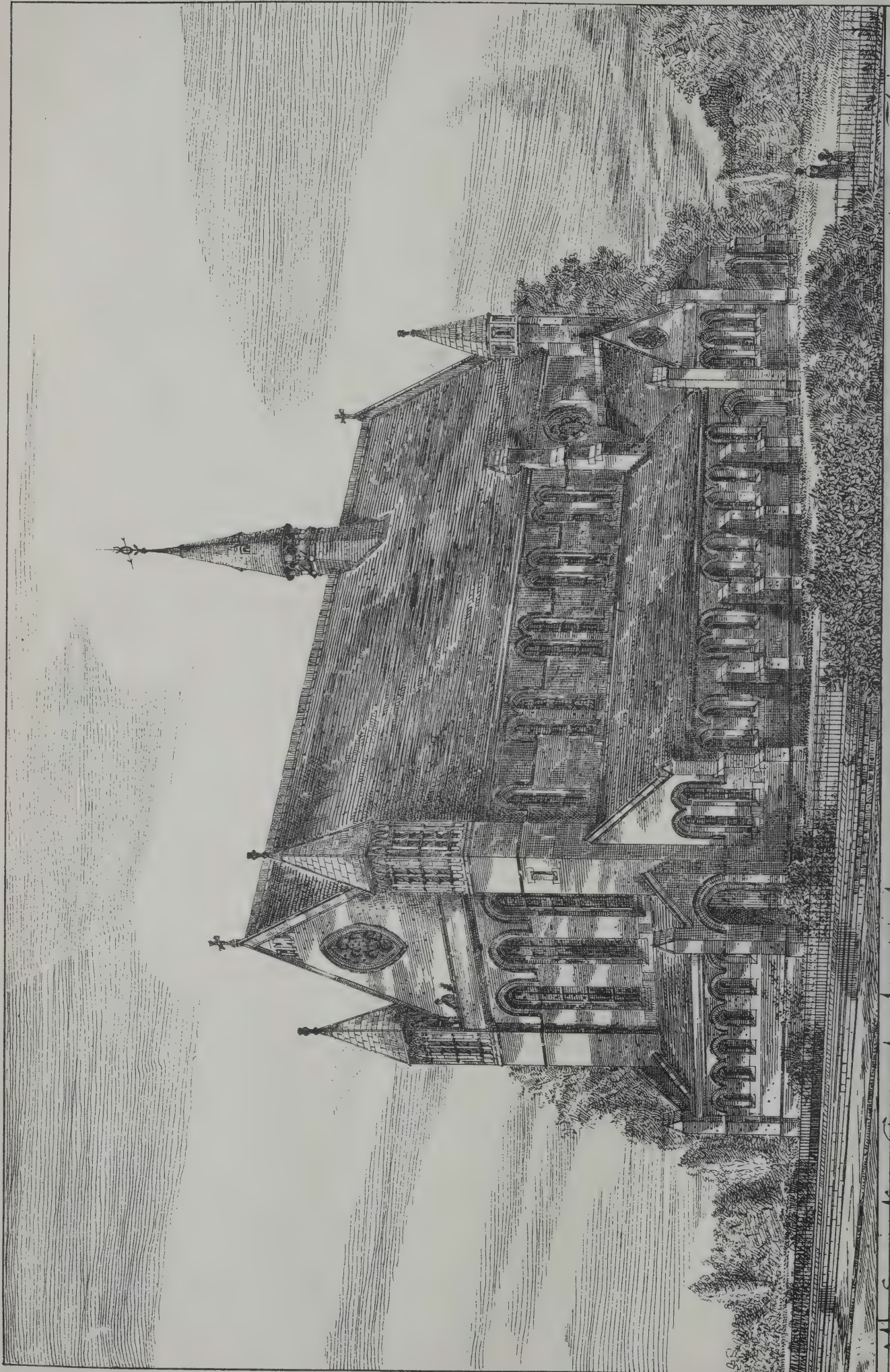


Spangue & Co. 22, Martine Lane, Canton St. 27C









All Saints Church Ipswich

DESIGN BY MESS<sup>rs</sup> CROSS.

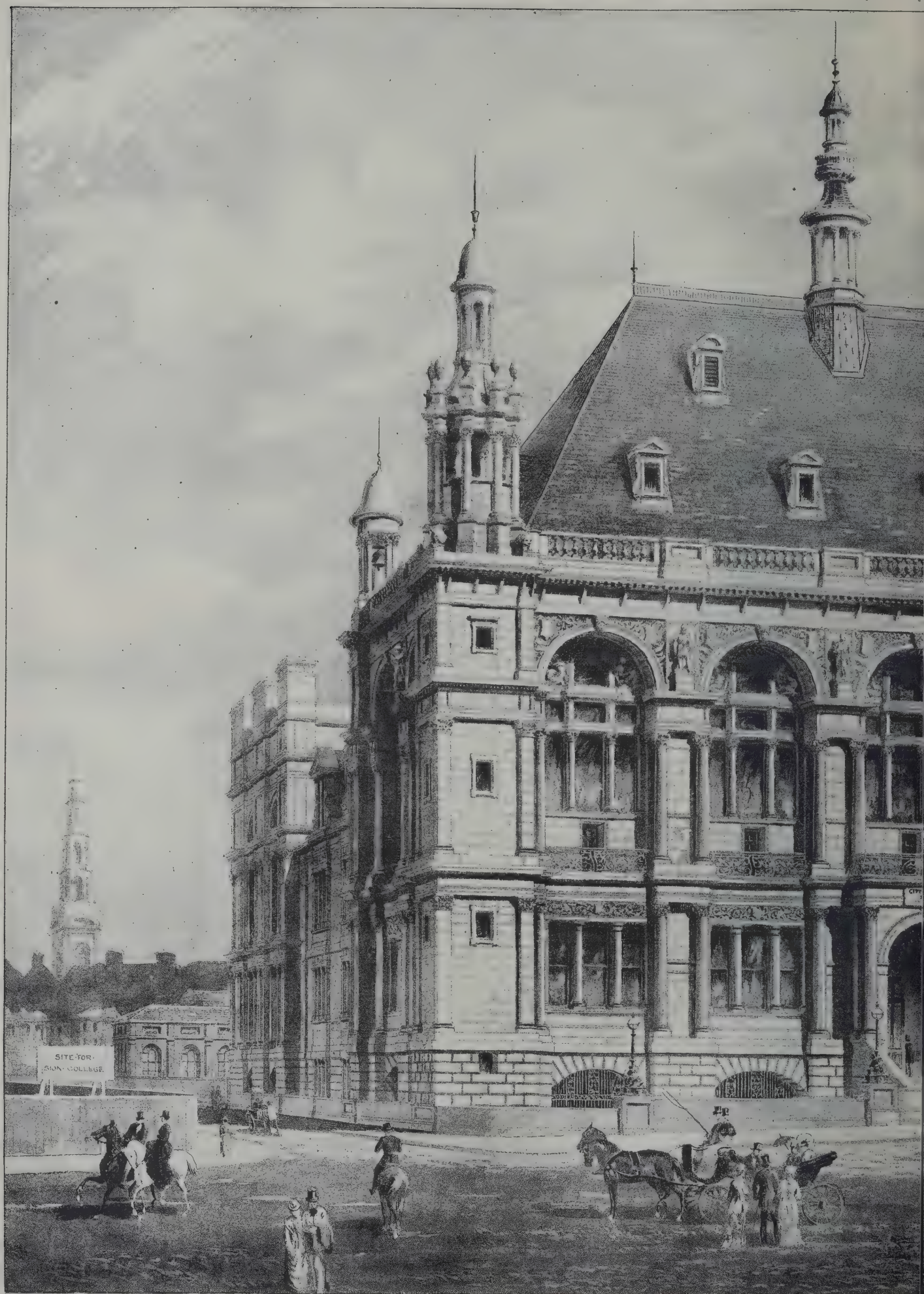
Exterior View

Spangley & Co. 22, Mark Lane, Cannon St. E.C.









"INK- PHOTO," SPRAGUE & CO. LON.

THE CITY OF LONDON SCHOOL

MESSRS DAVIS & ELLIS



Sept 29<sup>th</sup> 1883.



L, VICTORIA EMBANKMENT.

UEL, ARCHITECTS.









All Saints Church Ipswich Interior View looking East















## ILLUSTRATIONS.

THE CITY OF LONDON SCHOOL, THAMES EMBANKMENT.

THE site of the City of London School is an irregular oblong, having a frontage of 136 feet, facing the Embankment, and a depth next the new side street of more than 430 feet. It becomes wider as it recedes from the Embankment. It is bounded on the east by the lofty flank wall of the Royal Hotel, and on the back or north side by some vacant building land belonging to the Corporation next Tudor Street. The site, which was placed at the disposal of the School Committee by the Corporation, has been valued by independent surveyors at 95,000*l*.

The surface of the site of the building is entirely composed of made ground, which has been filled in at various dates at the back of retaining walls, as successive belts of the foreshore have been reclaimed from the river. All the foundations of the school building are carried to an average depth of 28 feet below the level of the school playground, and large rectangular holes were sunk through the made ground down to a bed of Thames ballast, which was met with at that level over the whole site, and which doubtless formed at one time the bottom of the river. The holes were then filled in with Portland cement concrete up to a level of 30 inches below the surface of the playground, so that the school building stands on a series of concrete monoliths more than 25 feet high, and ranging from 10 to 15 or 16 feet square. The foundations of the gymnasium, latrines, and boundary walls are carried to a small depth only, and rest upon compact made ground, which has doubtless been in position for a century. These out-buildings being by no means heavy, are carried by a wide bed of concrete resting on this made ground.

The whole of the floors throughout, except those to the porter's bedrooms in roof, are fireproof, consisting of Portland cement concrete, filled in between rolled iron joists, which are spaced about 27 inches from centre to centre. The lintels throughout are made up of rolled iron joists, and an unusually large amount of constructional ironwork in girders and columns has been employed at the level of the ground floor, so as to avoid obstruction in the covered playground, which occupies so large a portion of the basement beneath the building. Some of the columns and girders have very heavy work to perform, the column in the cloak-room, for instance, and that in the dining-room, having each to bear a load of nearly 300 tons.

The block plan is of the simplest character. The building is L-shaped. The shorter arm of the L facing the Embankment is three storeys high, and contains the great hall on first floor; the administration-rooms and library on ground floor; covered playground on basement. The longer arm of the L, facing the new side street, which leads back from the Embankment to Tudor Street, is the teaching block, and contains natural science school and lecture-hall, and two class-rooms on second floor; eighteen class-rooms on first and ground floors; hat and coat room, dining-room, and covered playground on basement; the gymnasium and latrines are detached buildings in the playground. A common-room and ante-room for assistant masters, a kitchen with its appurtenances, and apartments for the resident porter are provided in suitable places.

The exterior of the hall block facing the Embankment is constructed entirely of Portland stone, but the columns of the windows have polished red granite shafts. It is in the style of Italian Renaissance enriched with carving and sculpture. The Embankment front of the building is 120 feet long, having an ornamentally treated flanking tower at each corner, and a slightly projecting central entrance under a porch. A wide flight of steps leads up to this porch from the Embankment, and there are a series of balconies at the level of the great hall floor. The composition is three storeys in height, the basement consisting of large segmental-headed openings filled with iron grilles enclosing the covered playground. The ground-floor has three-light square-headed windows divided by columns. The first-floor windows have arched heads and are deeply recessed. The tympana beneath these arched heads are filled in with allegorical seated figures representing various arts and sciences, and the wall spaces between these have square-headed niches containing portrait statues of BACON, SIR THOMAS MORE, SHAKESPEARE, MILTON, and NEWTON.

The façade is crowned by a balustraded stone parapet.

Above this rises the great hall roof, which is a high-pitched roof of French character, covered with green slates and surmounted by a central *fèche*. This *fèche*, which forms the crowning central feature of the design, acts as the ventilator of the great hall. One object which this high roof serves is to prevent the school being overpowered by its gigantic next-door neighbour, the Royal Hotel. At the north-west corner of the hall block a smaller turret rises, which is surmounted by a stone bell-cot containing the school-bell. This forms the flanking feature of the west end of the great hall next the side street.

The exterior face of the teaching block next the side street, and the whole of the exterior of the building facing the playground is of very plain character, being faced with white brick and having stone strings and cornices and dressings to the windows. The outside of the lecture-hall on the second floor at the extreme north end of the teaching block rises above the adjoining buildings, and forms the flanking feature at the extreme north end. A low stone balustrade wall encloses the irregular forecourt, which is laid out as a garden on top of the railway tunnel next the Embankment, and is continued along the west front of the teaching block next the side street.

The preliminary contract for the foundations was carried out by Messrs. HIGGS & HILL. The main contract for the building was carried out by Messrs. JOHN MOWLEM & Co. Among the sub-contractors employed by them may be mentioned Messrs. MEASURES, for the constructional ironwork; Mr. MITCHELL, for the marble-work to the principal staircase; Mr. EBNER, for the marble mosaic floor of hall; Messrs. JONES & WILLIS, for the ornamental iron grilles at the front entrance doorway; Mr. BOEKBINDER, for the carton-pierre work in the cove of great hall; Messrs. HOLDEN, for the copper-work to the central *fèche*, with its wrought-iron skeleton and dormers of hall roof; Mr. BOYD, for the class-room grates, and Messrs. STEEL & GARLAND those for library and committee-room; the Coalbrookdale Company, for the pillar lamps on balustrade; Mr. ANDERSON, for the lightning-conductors. Milner's Lock and Safe Company have supplied most of the locks and lock-furniture, and Mr. ODELL the stained glass. Separate contracts were let to Messrs. HERRING & SON, of Chertsey, for the hot-water apparatus; Mr. J. F. CLARKE, for the gas-pipe work and sunlights, cooking apparatus and fittings, and sundry gas-fittings; Messrs. STRODE and Mr. R. H. HUGHES, for the more important gas-fittings; Messrs. DAYMOND & SON, for the sculpture; the North of England School Furnishing Company, for the great hall and school seats and desks; Messrs. STORY, for the general furniture; Mr. LAURIE, for masters' tables, blackboards, &c.; Messrs. WILLIS, for organ; and Mr. SPENCER, for the fitting-up of gymnasium. The architects of the building are Messrs. DAVIS and EMANUEL, whose design was adopted in competition. The water-colour drawing from which the illustration is taken was exhibited this year at the Royal Academy.

DESIGN FOR ALL SAINTS CHURCH, IPSWICH.

THIS design was one of those submitted in the recent competition by Messrs. CROSS, of Hastings and Chancery Lane.

STUDIES BY M. DUPAIN.

AN illustration of an historic painting by M. DUPAIN, of Paris, was lately published. We now give some studies from the artist's portfolio, which will suggest the range of the subjects undertaken by M. DUPAIN.

The Ornamental Candelabra on the two refuges at the entrances to the Northumberland Avenue were completed on Monday last, and the lamps which surmount them were lighted for the first time in the evening. These candelabra have been constructed from the designs of Mr. G. Vulliamy, architect to the Metropolitan Board of Works. On each are supported by curved brackets three of Sugg's flat flame globe lamps, specially adapted to the requirements of the architect. The burners are fitted with governors regulated to consume 35 cubic feet of gas per hour, and to give an effective light of 175 sperm candles, so that each refuge is illuminated by a total light of 525 sperm candles. Each lamp is fitted with an arrangement for reducing the consumption of gas at midnight after the heavy traffic has ceased.



## INDUSTRIAL EDUCATION.

AT the meeting of the British Association a discussion on industrial education followed the presentation of the report of the committee appointed to watch the working of the Education Code. Mr. J. F. Moss, clerk of the Sheffield School Board, stated that the following resolution, proposed by himself and seconded by Professor H. S. Foxwell, had been adopted by the committee of the section: "That the special committee be requested to consider the desirableness of making representations to the Lords of the Committee of Her Majesty's Privy Council on Education in favour of aid being extended towards the fitting up of workshops in connection with elementary day schools and evening classes, and of making grants on the results of practical instruction in such workshops under suitable instructors." He explained that the utility of workshop instruction had been demonstrated in Sheffield, Manchester, and elsewhere. What was more particularly desired was that boys in the upper classes should be taught how to use tools in simple operations upon wood and iron. In Sheffield remarkable results had been obtained in the science classes of the Central Schools, and the elder boys were allowed to attend an hour earlier in the mornings, so as to really put into actual practice some of the theoretical instruction they had received. Without attempting to teach any particular trade, it was sought to make the boys handy, helpful, and accurate, leaving them to get their special technical training afterwards, either in the technical institute or in the manufactory. The instruction given was of such a character as would be useful to the pupils in whatever sphere of life they might afterwards be called upon to occupy, whether as handicraftsmen or otherwise, and would exercise a beneficial influence in diverting them from the too prevalent notion that it was more respectable to seek to earn a livelihood without soiling their fingers than to join in the more directly productive occupations of life in connection with our national industries. Specimens of dovetailing, model-making, the formation of cubes and prisms, &c., together with drawings of machinery and illustrations of various mechanical movements were exhibited, as being the kind of work that could be produced by boys of fourteen or fifteen years of age and the practicability of giving workshop instruction.

Miss Becker said she regarded this as one of the most important committees of the association. Since the establishment of the association a large and comprehensive scheme of national education had been put into execution, and every man, woman, and child was deeply interested in the question of whether the instruction given in the schools should be the best which it was possible to give. The importance of the subjects treated of by the committee could scarcely be exaggerated. She thought that much of what was taught in the schools was comparatively useless, that was, as compared with these great subjects. She would banish altogether grammar, and instead of teaching the meaningless distinctions between adjectives and substantives, and nonsense of that kind, she would have the children taught the principles which underlay their daily lives. As to the girls, she would do away with a great deal of the needlework practised and teach cutting out on mathematical principles.

Mr. McKnight submitted that there was a danger of carrying the scientific instruction too high. We did not want at the expense of the ratepayers to turn out boys as apprentices to trades. Ignorance obtained with respect to history and geography, and the domestic training of girls must be attended to.

Dr. Gladstone observed that the remarks as to ignorance on certain subjects applied not to children, but to grown-up people. The study of history was now compulsory, and, practically, geography was taken up in almost all our schools. State aid should be given for the promotion of this kind of instruction, just as grants were made for needlework and practical cookery in girls' schools, and for chemistry and the fitting-up of laboratories for science classes. He took it that no particular trade would be attempted to be taught, but that boys would in the school workshops learn how to use tools and do for themselves what might be of great value in after-life, whether they took up handicraftsmanship hereafter or not. The committee would, no doubt, have pleasure in considering the matter, and he should personally be glad to see the proposal carried into effect as soon as possible.

"The Education of Artisans" was the subject of a communication by Dr. Barron, who thought that the present standard of elementary teaching was too high. Education must not stop at the three R's, but must be pushed on by State aid to practical and manual instruction in workshops provided to teach technology, in order to bring up our artisans to the level of those of other countries in the art of producing decorative fabrics. Government must aid by grants those artisans who were unable to pay for advanced technical work, by placing them in national workshops containing all the requirements to teach the industries of the country, after passing a certain grade in general education. The State should imitate the Whitworth Scholarships, making small grants of money to the poor class of artisans in aid of general elementary as well as practical education, and encourage art and science teaching in every place.

Dr. Carpenter said the great function of primary schools was to develop the mind, and at the same time to give as much as

possible of such information as would be useful in after-life; but he put in the first place the development of the mind itself. In science teaching in schools a knowledge of objects was the fundamental point. Instruction in science should be given not by the ordinary school teacher, but by one trained in science.

## SANITARY INSTITUTE OF GREAT BRITAIN.

THE Congress of this Institute was opened at Glasgow on Tuesday, the Hon. John Ure (the Lord Provost) presiding. Dr. Humphry, in his address in the outset, referred to the importance of the work carried on by the Institute in its relation to health, mental and moral, as well as physical, remarking that by the providential or natural law of the association of the physical with the other qualities was worked out the predominance of the best. In the great struggles of nations the best won because goodness was the associate of strength and healthfulness, and the maintenance of the sanitary condition of a people was a necessity to the maintenance of a high position among others. This became yearly more and more the case as increasing civilisation made us increasingly dependent upon sanitary regulations, and determined more clearly what those regulations should be. It was thus that civilisation met and counteracted her own evils. The clustering of peoples in masses together promoted in various ways the liability to disease, while growing intelligence and rapidly-advancing science pointed out the means of preventing and arresting it; and as prevention was better than cure, so the science which promoted the former was better than that which attempted the latter. To this the members of his profession were fully alive, and willingly assented; and though their pecuniary gains were won by their efforts to cure disease it was their constant and unselfish aim to trace out and stamp out the sources of disease; and it was their desire and practice to take an active part in every movement which had for its object the improvement of the sanitary condition of our people. Well would it be for our country when increased opportunity was given to them in Parliament and out of Parliament of making a deeper impression on the convictions of the country. One result that might be anticipated from such an influence would ere long be the institution of a Sanitary Department in our Legislature, distinct from the Local Government Board and under the direction of a Minister of Sanitary Affairs, and he could scarcely conceive anything more likely than this to promote the well-being of our people and their success in everything they undertook, whether it were literary, scientific, commercial, or military. Such an office extending its administration to the sanitary condition of cattle would do much to reinstate the interests of agriculture, and to reduce the price and improve the quality of animal food. It would find a further scope for action in considering and checking the diseases to which our various food-producing plants became more liable as they were more highly cultivated; and which, in many parts of the globe, were producing great devastation and pecuniary loss, with accompanying distress and injury to the peoples. Under such a sanitary office the department of the Registrar-General would properly be placed; the Ordnance and Geological Surveys and the Meteorological Office should be in connection with it; and the Sanitary Institute would be a valuable handmaid in carrying on that which was perhaps its most important work, the conducting the examination of surveyors and inspectors. Among other benefits which would be likely to follow the formation of a separate governmental department, giving its full and undivided attention to sanitary matters, was the redistribution and greater equalisation of the sanitary districts, together with a provision for their harmonious co-operation—the bringing, that was, of all into closer relation with one another and with the central department, so that the events which were taking place in one district might be speedily communicated—telegraphed, if necessary—to others, and timely preventive measures against the spread or transmission of disease be taken. Moreover, the higher and more definite relation with the Government of a separate sanitary department would tend to promote that official sympathy which was now much wanting, and would encourage a proper attention to, and recognition of, the services of those men who devoted their time and abilities to sanitary science. It also would lead to a due consideration by Parliament of the pressing sanitary needs of the people—matters of far more importance to the nation than "agricultural holdings," "criminal procedures," and the greater number of those subjects upon which so much of the preceding sessions had been spent. Good sanitary legislation must ere long be recognised as one of the first necessities for a prosperous people; and the Government of England ought not to lag behind, as it had a tendency to do, in its efforts to provide this great boon for the nation. The president concluded by saying that the important points of house sanitation, water supply, food, engineering, and the great sewage question, which it would take some generations satisfactorily to settle, would be discussed in the various sections, and needed no comment.

On Wednesday an address was given by Professor Gairdner in the section of Sanitary Science and Preventive Medicine.



Professor Gairdner said that in general it must be admitted that the attitude of the physician towards his patient in all times had predisposed him to accept empirically, as it were, the disease as an existing fact, and direct his whole energies towards the question, how the individual patient, being already ill, could best be treated so as to emerge whole and sound. Prevention of disease, the great object of modern sanitary science, had too often been regarded as unprofitable, not merely in the common sense of being unremunerative, but also because the inquiry into causes belonging for the most part to the class of speculations, were condemned by inductive philosophy as destitute of fruit, and, therefore, wholly insecure and impracticable. Up to the very beginning of the present century the attention of physicians was but feebly attracted by facts and doctrines which, had sanitary science existed in any real sense, could hardly have failed to become generally accepted. That it should have taken two centuries to reduce to a practical rule in the Navy of Great Britain the measure by which Commodore Lancaster saved his crew from scurvy in 1603, was one of the facts which could not be got over, and which showed that in a practical sense preventive medicines, and the effective study of the causes of disease, were things of yesterday as compared with the ages of effort, not wholly unsuccessful, devoted to the cure of diseases. Professor Gairdner went on to speak of the enormous debt which sanitary and medical science owed to the late Dr. Farr, who gave an impulse of the highest importance to preventive medicine and sanitary science, and was in the end obliged to retire from his work with little of what could be called national recognition of his vast labours and eminent services to the State. He suggested the republication of Dr. Farr's works as the best of all possible monuments to his memory. It was a strong sense of the imperative necessity of maintaining the connection between curative and preventive medicine that led more than anything else to his acceptance in 1863 of the office which alone gave him any claim upon the attention of the Congress that day. As a teacher of the practice of medicine, already of some experience, and recently appointed professor of that subject in the University of Glasgow, he was invited by the authorities to assume the responsibility of the sanitary administration of this great city. He was assisted in the work by Dr. Russell and other devoted officers. During the period he held the post from 1863 to 1872, several considerable epidemics had been dealt with, and these revealed very clearly the weak points of Glasgow sanitation according to the means and resources which then existed. In the course of some further remarks, Professor Gairdner observed that from subsequent facts and observations it became probable that not only as against zymotic diseases, commonly so called, but also as against those inflammatory and even chronic affections of the lungs which formed by far the largest factors in the city death-rate, the true preventive medicine was to be found chiefly in improvements directed towards the ventilation, cleanliness, and general comfort of the houses of the poor. Overcrowding and overbuilding of ground space especially were to be corrected, not only as conducing to typhus fever, but to many other diseases, and that was the great object aimed at by the City Improvement Act. He was in a position to declare his belief that the policy so initiated was eminently beneficial, and that it was only by steadily following out the same principles that our great cities could gradually uproot the evils of centuries. Glasgow was a city peculiarly exposed to numerous causes of ill-health, for its population being upon a relatively smaller acreage than any except Liverpool, it was breeding up from year to year a much larger proportion of young lives than any other city. The inference clearly is that the sanitary state of Glasgow is in some way connected with its intense productiveness, and its too small superficial area. There was still much to do. Let them hope that the authorities of the present and of the future would, as Milton said, "Bate no jot of heart or hope," but go on steadily in the course that had been so well marked out for them.

Mr. E. C. Robins, F.S.A., read a paper on "The Disabilities of Inspectors of Nuisances, and their Remedy." He said that inspectors of nuisances were often handicapped by conditions very unfavourable to the satisfactory discharge of their duties. These duties were of a nature to bring them not only into contact, but also into antagonism with their employers, and influences were brought to bear upon them which rendered it often a very unpleasant and ungracious duty to put in force the provisions of an Act designed for the public benefit but opposed to the personal and private interests of parishioners, many of whom were members of the vestry, guardians of the poor, or sat on local boards of health in the district. The support which the inspectors had a right to expect from their superior officers of health was oftentimes grudgingly given, or absolutely withheld in cases where influential members of local authority were concerned. The preventive measures which it was so important to institute prior to the breaking out of a disease were postponed until the disease itself had appeared, and thus remedial measures were resorted to when too late to prevent their necessity. Periodical house-to-house inspections were essential to the due performance of the duties of an officer of health or inspector of nuisance in the neglected portions of his charge. Let the energetic few in every district, in every parish, take the matter to

heart, and forthwith establish a private society whose honorary self-sacrificing labours for the benefit of all would exercise its moral influence on the rest, and let their house-to-house inspection result in drawing the attention of owners to the insanitary state of their premises, and they would achieve a greater saving of life than would ever take place by the action of the Auxiliary Forces, the so-called volunteers. Let them establish a sanitary life-saving, health-giving movement, and let the officers of the parish authorities feel that they were supported in their arduous and unthankful labours by the public sympathy which such institutions would prove, and they would hear no more of the unrighteous use made by the powers that be of influence they possessed to the discouragement of honest, earnest, and capable public sanitary inspectors.

A paper on "The Dwellings of the Middle Classes," by Mr. H. C. Burdett, dealt with evils attaching to the present system of erecting middle-class houses, and the remedies for their removal. The writer contended that masses of the middle classes are frequently as badly provided with house accommodation as any class in the community. This remark applied chiefly to the poorer middle classes, living in houses let from 35% to 75% a year. These houses were erected by speculating builders, and were usually mortgaged as the work proceeded. This "jerry" builder was often a member of the local board, and he had powerful friends there, and consequently the defects of his work were overlooked. Such houses, because of their taking exteriors and internal plans, deluded the tenant or purchaser with a prospect of comfort; but within a couple of years they became a misery and a danger to the occupants. For the purposes of his paper, Mr. Burdett had visited a "jerry" builder's district at Willesden. The houses had been completed about two years. Their exterior was fanciful, the interior was cunningly planned. But their foundations were "jerry" builders' rubbish, strewn on a clay soil. Already they were damp, the floors were out of level, the roof sagged, the plumbing had been scamped, the walls were cracked and bulging, the soil pipes were ineffectual; in fact, almost every by-law of the Willesden Local Board had been disregarded. He had noticed the same conditions at Stamford Hill, Brixton, and elsewhere. The remedy he proposed was, first, the formation of a Local Householders' Association, part of whose duties it would be to prosecute offending builders. Further legislation on some points would follow, and local government bodies should be made liable to some sort of punishment if they failed seriously in their duties.

Among the proceedings of Thursday a paper was read by Mr. John Honeyman, which will be found in another column.

## THE MERSEY TUNNEL.

A PAPER on the Sub-Mersey Railway was read at the meeting of the British Association by Mr. Charles Douglas Fox, one of the engineers engaged on the Mersey tunnel. He said the question of providing railway communication between Liverpool and Birkenhead is one that has for many years occupied public attention. High-level bridges and tunnels have been on more than one occasion proposed, and amongst these the Mersey Railway was authorised, first as a pneumatic, but afterwards as an ordinary railway. The company was organised as at present constituted in 1881, with the Right Hon. Henry Cecil Raikes as chairman, the Right Hon. E. Pleydell Bouverie as deputy-chairman, Major Isaac and Mr. John Waddell as contractors, and Mr. James Brunlees and the author as engineers. The length of the railway is 3 miles 8½ chains, of which almost the whole is either in tunnel or covered way, and it is being constructed for a double line throughout, with stations at Green Lane, Borough Road, and Hamilton Square in Birkenhead, and James Street and Waterloo Place in Liverpool, the works being arranged for trains every five minutes each way, the traffic being expected to be very large. The land works do not call for special remark, being to a great extent in tunnel through sandstone rock under the public streets. For the purpose of the works under the river two shafts have been sunk on each side of the Mersey, one being for pumping purposes and for communication with the drainage heading hereinafter mentioned, and having a depth of about 180 feet; the other for winding and ventilation from the main tunnel, and about 90 feet deep. These shafts are lined partly with brickwork and partly with iron tubing. From near the bottom of each of the pumping shafts a drainage heading, rising slightly towards the centre of the river to allow the water to run to the pumps, is being driven partly by hand and partly by Colonel Beaumont's boring machine, which cuts a circular heading 7 feet diameter. Out of a total of 1,774 yards, 1,143 yards have already been driven, up to September 5, 1883. The sandstone rock through which the works are carried, though hard and compact, is porous, and yields more or less water. The pumping machinery on each side consists of two 20-inch and two 30-inch sets of bucket lift pumps, driven by compound engines by Hathorn Davey & Co., of Leeds. A 40-inch set of plunger pumps, to be driven by an overhead engine by Messrs. Barclay & Sons, of Kilmarnock, is now being fixed as a duplicate on each side. The 30-inch sets have hitherto been found amply sufficient to clear the



works. The paper described the mode of setting out the works the precautions adopted under the river, the means used for tubbing back the water, and the details of the main tunnel, the excavation for which has now progressed some 1,590 yards, closely followed by the brickwork lining. The paper was illustrated by diagrams and models.

Colonel Beaumont supplemented the paper by a short statement of what the boring machine had done in other places, and what it was expected to do. It was employed on the hard chalk of the Channel Tunnel, and a distance of 5,000 yards had been driven with it. The greatest speed that had been attained with it had been—more as a *tour de force* than with any idea of keeping it up—one foot every ten minutes, and this speed was kept up for two hours; so that the capacity of the machine for boring through the hardest chalk, requiring blasting, might be taken to be at the rate of 48 yards in every 24 hours. The speed which he anticipated getting, and which he had every reason to believe would be got before the machine had completely perforated the rock under the Mersey, was 1 foot per hour, or 8 feet in eight hours. It might be asked why there should be this enormous difference in speed. The reason was the necessity for changing the cutters more frequently in cutting the hard sandstone rock than in cutting the softer chalk, in consequence of the greater heat developed. In the softer chalk from sixteen to twenty feet could be cut without changing the cutters; but in the sandstone rock the greatest distance that could be cut without changing had been 18 inches, and it had been brought down as low as 3 inches. This latter figure, however, was not due to the hardness of the rock, but, to a certain extent, to the want of proper temper in the tools, and to the fact that ice was forming in the engine, and consequently a regular action was not imparted to the cutting tools. The new red sandstone that the Mersey tunnel was being driven in he took to be rather more than half-way in hardness between the chalk and the hardest sandstone. The machine had been tried in the hardest sandstone, and with the most perfect success, so far as demonstrating the possibility of the application of the system to the cutting of the harder rocks. This individual machine was not sufficiently strong to cope with the difficulty of cutting the harder rocks, but a larger machine was in course of construction, and he had not the slightest doubt that the outcome would be that the hardest red sandstone rocks could be driven, without the use of explosives, at an average rate of eight yards in the twenty-four hours. If this could be done, he thought the system of driving would have a very important effect on the development of coal mines, more especially in those cases where they were troubled with gas or where there was any danger from explosions.

## THE FRENCH ACADEMY OF ARTS IN ROME

THE late refusal of the French Government to improve the financial condition of the French Art Academy in Rome makes it interesting to know what are the arrangements in that institution. As is well known it was founded in 1666 by the great French Minister, Jean Baptiste Colbert. At that time it was decreed that only Frenchmen of pure extraction, unmarried, and at least thirty years of age, should be admitted, which regulation is still in force. For the applicants for admission, ten in number, special apartments are provided in the Academy, where they have to work at their first sketches for thirty-four hours without leaving the Academy. Then seventy-two days are allowed for the subsequent carrying out of the designs in oils or clay, as the case may be. No one is allowed to enter the reserved apartments, and no artist may show his sketches on pain of immediate exclusion. Copperplate engravers and gem cutters are allowed ninety-six days for the completion of their designs; architects 110 days, but the latter may not leave the house while making their first sketch for four days and three nights. Each artist receives 950 frs., being 300 frs. from the State, 255 frs. from a legacy made by Madame Laboubtène, and 395 frs. from a legacy made by Charles Dubosc. From a sum destined for the purpose by Madame Leprince, the winner of the grand prize receives 1,000 frs., and 600 frs. for his travelling expenses to Rome from the Government. When the artist arrives in Rome he is provided with a room and studio; the Academy receives from the Government 1,200 frs. yearly for the board of each artist, and a sum of 300 frs. is annually laid aside for him during the four years of his stay. When an artist returns to France on the expiration of the four years, his picture, having won the prize in Rome, is generally bought by the Government for 4,000 or 5,000 frs. A legacy made by the Countess de Caen secures to the laureate, on his return to Paris, a sum of 3,000 frs. annually for a term of three years. The marble necessary for the sculptors during their residence in the Academy is provided by the Government. Architects are nearly as well situated as painters, and receive besides 800 frs. from the Government in order to study in Greece. Copperplate engravers and gem-cutters are less favourably circumstanced, though the former have a share in legacies left by M. Alhumbert and the Duc de Cambacérès. The musicians, who have only been admitted to the Academy since

1803, receive nothing extra. Artists and sculptors who win the second prize receive 1,000 frs. from the legacy of the Duc de Cambacérès and 2,000 frs. from the Pigny legacy. Architects receive 500 frs. from the Lussore legacy. The widow of M. Chaudesaignes left the last legacy to the Academy, consisting of 2,000 frs. for two years' study in Italy for architects.

## THE CARLISLE GRAMMAR SCHOOL.

THE new buildings for the Carlisle Grammar School, which have been erected from the designs and under the direction of Mr. G. D. Oliver, of Carlisle, were opened on Thursday last week. An illustration of the building appeared in *The Architect* of May 13, 1882.

The aspect of the front of the main building is south-east, and as it is approached from Albert Street the most striking feature is the central tower in which the main entrance is placed, the porch being surmounted by a handsome oriel window. Speaking generally, this tower may be said to mark the division between the boarding-house and the class-rooms, the great aim of the promoters of the new scheme being to secure the establishment of a good day-school rather than a large boarding-school. General class-room accommodation has been provided for 250 boys, while provision has only been made for about 30 boarders. Entering the main door the visitor finds on his left in the main building the governors' board-room, and then a series of six class-rooms, two being in the main building on the south front, and the remaining four on the west wing facing Spring Gardens Lane, between the main building and the lecture hall; the side entrance for day scholars from Spring Gardens being about midway between these two points. The class-rooms are all lighted on the left of the scholar, and are each 20 feet 6 inches square, and with open roof of an average height of 17 feet. They are being fitted with dual desks, each capable of holding a class of 32 boys. Four of these class-rooms are provided with lantern lights, with side lights, two of these lanterns for the drawing-class room having also north top lights. These lanterns will also materially assist the ventilation of the rooms. Two of the class-rooms are arranged so as to be easily converted into one for temporary uses. For this purpose William's patent partition has been used owing to its facility in use and the small space it occupies when folded. The walls of class-rooms are lined with a wood dado, 4 feet 6 inches high, and the doors have an opening fanlight above. The laboratory, or practical chemistry room, is 20 feet by 20 feet 6 inches by 17 feet high. It is arranged, in conjunction with a small preparation room adjoining, with a gas sink closet and flue, heated with gas to rarefy and carry off gases to external air. It is also being fitted with chemical rack, benches with hard wood tops, gas positions, sinks, wash-basins, table with balance, furnace, closet, &c. The day scholars' lavatory, &c., conveniently placed opposite to the day scholars' entrance in Spring Gardens Lane, is centrally situated amongst the class-rooms, and is fitted with a range of basins and two long hat and coat racks, besides wall space. The class-rooms and corridors are all paved with solid blocks of wood. The class-rooms open into a long corridor, which leads to the lecture-hall. This is a very elegant apartment, 76 feet long by 28 feet 6 inches wide. It is entered from the corridor by two pairs of folding doors, each 5 feet wide, and is amply lighted. The roof is partially open, the upper portion above the beams being finished in plaster panels, divided by moulded ribs of pitch pine, and the lower portion above the cornice being boarded. The walls are lined with a wood dado 6 feet high. The size of the hall is ample to seat 300. The decorations of the hall are simple but effective, and among them may be especially noted the tinted cathedral glass in the windows. The ventilation of the class-rooms is effected by a very complete system. Fresh air is admitted from the outside over hot-water coils placed in the window recesses, and in the rooms with fireplaces through fresh-air hygiastic stoves, which have air chambers behind and under the hearth, and a channel communicating with the outside admits fresh air under the hearth and to the back of the stove, where it is heated, and passes over the fireplace and into the room as warm fresh air. The foul and vitiated air passes out of the room by openings in the upper part of the walls, communicating with air-tight passages in the corridor ceilings, and is extracted by a pilot furnace fixed near the ordinary heating apparatus, and passes into the chimney ventilating shaft. The head-master's dwelling-house has been built at the east end of the main building, and the rooms for the accommodation of the boarders are all situated between the head-master's house and the class-rooms already described. The head-master's house is quite distinct from the boarding-house, although adjoining and communicating with it.

The contractors for the building were Messrs. Beatey Brothers, Carlisle, for the builder's work; Messrs. H. & R. Court, Carlisle, for the joiner's work; Mr. W. Anderson, Glasgow, plumber; Mr. T. Nanson, Carlisle, slater; Messrs. D. Stanfield & Son, Carlisle, ironfounders; Mr. R. M. Ormerod, Carlisle, plasterer; Messrs. Kirk & Robley, painters and glaziers. Mr. Thomas Allen was clerk of works.



The Bishop of Carlisle, in the course of an address on the occasion of the opening, said he should like to touch upon one or two points connected with the report which the architect had just read to them, and he could not do so without in the first place saying with full honesty and sincerity that he did congratulate the architect upon the work that he had accomplished; and he congratulated the people of Carlisle upon having had the services of so good an architect, more especially as he was one of their own citizens. When the designs for the building were first laid before the governors there was very little doubt that the drawings suggested by Mr. Oliver were the most satisfactory of those that were laid before them; and he quite anticipated that the building would be handsome, satisfactory, and convenient; but he was also able to say this, which one could not always say, that the result had entirely come up to his expectations, and he liked the building now even better than he did when he saw it only in ink and paper. The building was handsome, and what was quite as important, it was a convenient one. He had often looked over the building, and had been exceedingly struck by the manner in which every want had been attended to, and the complete way in which the school had been raised in such a manner as to meet all the most advanced educational requirements of the age. With regard to the beauty of the building he was exceedingly pleased with the exterior walls and the interior of the structure. There was only one regret that he had concerning it, shared by a great many persons and arising out of causes over which they had no control, and it was this, that this very handsome building did not form a more conspicuous object in the city of Carlisle than it did in the retired situation it now occupied. If one could have had one's wish, the building should have stood in a place where everybody could have seen it, and that everybody who visited Carlisle should have gone away and said, "What a remarkably handsome modern building the people of Carlisle have erected." When they instructed their architect they told him that the building must be one which could be erected for 10,000*l*. It had been erected for 10,000*l*. He entirely agreed with what was contained in the architect's report, when he spoke of the admirable manner in which the contractors had done their work. Several gentlemen had seen the building, and there had been no difference of opinion amongst them as to the amount of work which they had got for the money. The work was not cheap and nasty, it was cheap and good. It did great credit to the architect to have the work done for the money, and great credit to the contractors to have carried out his intentions and erected such handsome buildings as these for 10,000*l*.

### EGYPTIAN ANTIQUITIES.

MR. C. T. GATTY, curator of the Mayer Museum, Liverpool, writes: Amongst the antiquities in the Mayer Museum is the lintel, or false door, of an Egyptian tomb, which has recently created some interest among English Egyptologists.

The lintel is of the calcareous stone commonly used for the Egyptian sepulchral tablets, and measures 32½ inches by 25½ inches. The sculpture upon it is carved partly in low relief and partly in intaglio, and depicts the deceased person, seated on a stool, with a table of offerings before him, such as the surviving relatives were accustomed to offer in the ancestral tombs—a trussed goose, &c. Over this table is an inscription giving a list of offerings—"Libations of water, incense, and wine;" and below the table, "Thousands of oxen and geese, bread (and) vegetables." Over the head of the figure is a horizontal line of hieroglyphic inscription, stating that the deceased's name was Tetenankh, and that he was a "superintendent scribe and royal relation." In addition to these titles, he is said to be "Over the abode of . . .," or, according to De Rouge's translation, "Scribe of the house of the rural domain." The right-hand column of the vertical line of hieroglyphics speaks of "thousands of different fabrics of linen" and "abundance of linen." Mention is also made of two different kinds of vases, Ab and S's, "thousands" of which are asked for. A description of this tablet, and a rough woodcut, were given under No. 294 in the first edition of the catalogue of the Egyptian antiquities in the Mayer Museum. A similar account, without the woodcut, is in the present edition. The interest of this tablet lies in its great antiquity. Mr. William Flinders Petrie, who has kindly interested himself in comparing the tablet with similar works in Egypt, states in a letter to the writer: "I should not hesitate to ascribe it to a period before the fourth dynasty, or to the time of Seneferu, Khufu (Cheops, the builder of the Great Pyramid), or possibly Khafra, the three kings who begin the fourth dynasty, the earliest kings of whom any remains are known. It is probably older than anything else in England; in fact, nothing in Egypt could be proved to be older. I have examined every accessible tomb in the great Necropolis of the fourth and fifth dynasties of Ghizeb, and copied many of the inscriptions, and I can be certain that there is no such tablet visible. The tombs of Meydûm (lat. 29° 20'), of the time of Seneferu, at the end of the third dynasty, are more like it, having hawks and standards above the list of offerings as in the Mayer Museum tablet; but certain small rock-cut tablets that I found at Abusir (near Memphis) are most like it in the form

of the numerals in the list of offerings. These Abusir tablets I reckoned on being certainly of the third dynasty, or perhaps earlier. The tablet of Shera, at Oxford (said to be the oldest thing in England), has no such unequivocal signs of antiquity about it, and might belong merely to the fourth dynasty, though bearing the name of a king of the second dynasty. It is, therefore, not at all improbable that the Mayer tablet may be the oldest in England, and at least none but the Oxford tablet can dispute that honour with it. Among the definable evidences of the early age of the tablet, I would mention the simplicity and boldness of the work of the titles, the large simple figures, and the mixture of part relief, part intaglio, being like the style of the tombs of Meydûm under Lenefera, the earliest known remains." Dr. Birch, of the British Museum, the most eminent English, if not European, Egyptologist, has no hesitation in pronouncing the tablet "of very remote antiquity; certainly amongst the oldest." This interesting information is another valuable testimony to the historical importance of the Egyptian antiquities in the Mayer Museum.

### LOW CEILINGS.\*

BY JOHN HONEYMAN, F.R.I.B.A.

THE height of the ceiling affects both the owner and the occupier of a dwelling, but chiefly the occupier; for, whereas it affects the owner's pocket only, it affects both the pocket, the comfort, and the health of the occupier. If the owner is perfectly free, he will simply adopt the height of ceiling which he thinks will enable him to get the largest return from his property. It by no means follows that he will adopt a low pitch. But if the ground he builds upon is dear, and the demand for houses great, he will be tempted to make the storeys low and increase their number; and in so doing he will be doing what is at once best for himself, and also—unless he make the rooms small as well as low—what is best for the community.

But in most of our large towns and populous places a person about to build is not free. He must build in conformity with regulations limiting the total height of his building, and prescribing, among other things, the height of ceilings and the cubic capacity of rooms. Hampered by such restrictions, he cannot suit his houses to the requirements of the districts where they are wanted; he must make them as Parliament has been pleased to prescribe, however extravagant or unsuitable for the people who require them, and he must get a profitable return for his expenditure from these very people, who don't wish extravagance, and can't afford to pay for it, but who, in the circumstances, either *must* pay for it or do without dwellings. For example, if the Police Bill drafted by the Corporation of Glasgow became law, a man having land bounded by a new street 40 feet wide would not be allowed to erect a tenement of dwellings in that street more than two storeys high, with this necessary result, that his return for the cost of land and buildings must be got from two tenants instead of from four or six. If left to his own discretion he would, at a small additional outlay, make his buildings say four storeys high, and—profitably to himself—accommodate on the same ground twice the number of tenants at lower rents. Now, assuming in the meantime that the four houses erected in this way were as good as the two made in conformity with the Police Bill, it must be perfectly obvious that, whether the owner made more out of the transactions or not, the erection of the four would be distinctly most advantageous for the tenants, and therefore for the community at large; because in this way twice the number of people would get accommodation where they want it—not where the Corporation say they ought to want it—and they would get it at a greatly reduced rent, both, I submit, considerations of the very greatest importance, and having a direct bearing on sanitary questions of great interest. Of course, if it could be proved that high ceilings and low tenements were essential to secure healthy conditions, a great deal could be said in favour of compulsory sanitation in that direction, although even in that case I should be prepared to say a great deal against it; but it has been abundantly proved—and this was very clearly brought out at the Newcastle Congress—that there is no necessary connection between density of population and a high death-rate; and I may say that the very same statistics—namely, those of the various improved dwellings' companies—which most conclusively prove this as conclusively show that there is quite as little connection between low ceilings and a high death-rate, as in all these dwellings the ceilings are low and the storeys numerous. Most people, however, in this part of the country at all events—I may venture to say most sanitarians—still cling to the idea that, *ceteris paribus*, a room with a high ceiling is a more healthy dwelling than one with a low ceiling. Now, I wish to strike at the root of this prejudice, which as affecting legislation has had—and may, unless eradicated, still have—most pernicious results; and I hope to be able to prove that, other things being equal—that is, that, given two rooms of different heights but of the same capacity, having the same size of chimney opening, the same area of window,

\* From a paper read September 27, 1883, at the Congress of the Sanitary Institute of Great Britain, held at Glasgow.



door, and vent openings—the lowest will be the cheapest, the most commodious, the most comfortable, and the healthiest dwelling of the two.

I shall dwell chiefly on the sanitary aspect of the question, merely devoting a sentence or two to the other important points I have mentioned. One of these, the greater extent of floor area in a low than in a high room of the same capacity, is self evident, and the advantage of this to the occupant is equally obvious. The economy of the low pitch is not quite so readily understood. For the sake of illustration, I have calculated the rents which must be charged for houses of 2,000 feet capacity in order to yield 5 per cent., arranged in three different ways—first, in tenements of two storeys of ten feet; second, in tenements of three storeys of eight feet; and, third, in tenements of four storeys of eight feet; allowing a proportionate area of vacant ground in each case; and I find that in the first of these—the two-storey tenement—the rent would require to be 9*l.* 6*s.*, in the three-storey tenement it would be 8*l.* 5*s.*, and in the four-storey tenement, 7*l.* 14*s.*; so that the artisan contented with an eight feet ceiling might have a roomier house for 7*l.* 14*s.* than he can possibly get for less than 9*l.* 6*s.*, where restrictions already referred to exist. In other words, he is compelled to pay 2*l.* 8*s.* per annum, or fully a third more than might otherwise be required, and at the same time he must be content to occupy a smaller house in a less convenient locality, without one solitary compensating benefit, merely because some sanitarians, chiefly municipal, think such treatment good for him. To my mind it is unmitigatedly bad, and a very serious matter for our working classes. For observe, it is impossible to take this 2*l.* 8*s.* out of the owner's pocket; the tenant must pay every penny of it, as, of course, no builder in his senses is going to put up dwellings which will not yield him 5 per cent. at least.

But the important question remains—would the low house be healthy as well as cheap and roomy? In my opinion it would, and in a greater degree than the high house. The means of ventilation, which alone are admissible in such dwellings, being of the simplest possible kind, it will be found that it is easier to ventilate a low room than a high one by their agency. Practically, the ventilation must be effected by the admission of fresh air by doors and windows—or round these when closed—through the badly fitting joints of floors and skirting boards, or by special inlets not intolerable to the inmates (if such can be devised) and the extraction of air by the chimney. Such means have been found sufficient, except where apartments are overcrowded, that is, except where the chimney is insufficient as an extractor. We may take it that in any room having a door, a window, and an open fireplace, three or four people may sleep safely, and the condition of the air will depend not so much on the capacity of the room as on the area and draught of the chimney. Those who are familiar with the subject will, I trust, excuse me if I say for the information of others in this mixed audience, that even such a capacity as is prescribed in our Police Bill—400 cubic feet to each adult—is utterly insufficient unless we have along with that a constant and rapid change of air. But to effect this change so that the whole volume shall be kept up to a safe standard of purity, it is necessary that the fresh air should be properly distributed and permeate the whole apartment. This point I fear is sometimes lost sight of. For example, if we take a room of 2,000 cubic feet with five inmates, to keep the air, not as pure as we could wish, but in a tolerably healthy condition, at least 5,000 cubic feet of fresh air would require to be passed through the room per hour; and as an ordinary open fire will easily extract that quantity, there seems to be no great difficulty about it. But, observe, it is quite possible to pass all that quantity through the room without purifying the atmosphere in any appreciable degree; we may let it all in at one side of the room and up the chimney at the other, leaving the air breathed by the inmates impure and poisonous, perhaps fatally; so that the more complete the distribution of the fresh air, the more beneficial will the ventilation be. Now the facility of distribution will depend to a large extent on the form of the room. If the room (always bearing in mind that we are speaking of rooms of the same cubic capacity) be high in proportion to its area, and the fresh air be admitted in the usual way referred to, the lower part only will be ventilated, and a large proportion of its atmosphere will remain impure; whereas, if it be low in proportion to its area it will all be well ventilated, and the inmates will get the full benefit of the room's capacity. In the other case they would not, as a considerable proportion of the high room would remain stagnant and foul—a condition objectionable on other grounds.

But, it may perhaps be said, granting that the air in the upper part of the room, say a fourth part of the total volume, remains unaffected, and that the 5,000 feet per hour allowance is distributed in the lower part only, is that not exactly where the fresh air is wanted? Certainly, but fresh air is not *the only thing* that is wanted in an artisan's house. Warmth and freedom from draughts are only second in importance, if, indeed, they are second. There are delicate women and tender babes to be considered, as well as robust men, and our mortality tables painfully remind us of the fact that that consideration is far too much overlooked. No doubt by the passage of a given quantity of air through a room you can make a part fresher than the whole, but it is evident that as you

reduce the part affected you necessarily increase the velocity and lower the temperature of the current; indeed, you can, without difficulty, carry this reduction so far that with the aid of a good-going fire, you may obtain a very high standard of purity, and a cold draught, of perhaps 150 feet per minute, in the only habitable part of the room, that is in the only part where the air is fit to be breathed. Our object of course must be to make every part of a room habitable, and to leave not one stagnant corner in it. In this way alone can we secure in the highest degree both essentials of a healthy dwelling—pure air and warmth. Now, we shall find that the lower the ceiling the more easily can this combination be secured.

Let us look a little more particularly at the superior facilities which the low room offers. The top of the door, from which I think the greater part of the air required should come, is necessarily near the ceiling, and the current will therefore completely disturb the upper stratum of air. The air from the window will have the same effect in a smaller degree, and both currents will be warmed by contact with the ceiling. We need never look to the floor as an air-warmer, except to a limited extent near the fire; a much larger area of the ceiling is heated, and in a low room there is not only a much larger area of ceiling to heat than there is in a high room, but the radiant heat upon it being more intense, it becomes an air-warmer of immensely greater power; and, obviously, this extra power in a low room can be used either to raise the temperature of the room, or to raise a larger supply of air to the same temperature. Besides, if in this way we are able to admit more fresh air near the ceiling, we shall also, in like proportion, be able to reduce inlets at a lower level, and to that extent get rid of cold draughts. Practically the quantity which can safely be admitted is limited by the means of warming it—the more we can warm, the more we can safely admit. I insist very much on the importance—the absolute necessity—of this heating in connection with the ventilation of small houses. Some people seem to think that hot air and foul air are synonymous terms; it would be much more correct to say that cold air and foul air are synonymous. If we wish the occupants of small houses to admit plenty of fresh air, we must not only convince them that it is good for them; we must show them how to do it without sacrificing something else which is good also, which is even better in their estimation—namely, comfort.

In conclusion, I desire earnestly to invite the attention of Scotch local authorities to this subject. It is clear that, if I am right in the views I have advanced—if it is the fact that from a sanitary point of view, a low ceiling is as good as a high one—much more if it is better—municipal authorities are utterly wrong when they prevent by legislation (as some have done, and others wish to do) the erection of low-ceilinged houses. It simply comes to this, that by such regulations they wastefully increase the rents which the working-classes must pay for house accommodation, and thereby in the most direct manner encourage overcrowding with all its attendant evils; while at the same time they effectually prevent the erection of improved dwellings, such as are now common in London and elsewhere in England.

## THE CORINTH CANAL.

IN a report to the Foreign Office on the trade of the Piræus, Consul Meslin describes the Ship Canal through the Isthmus of Corinth, which was commenced in May last year, the first mine being fired by Queen Olga, in the presence of King George, the Diplomatic Corps, and the principal Greek Government officials. The actual length of the canal when finished will be 6,342 mètres; the entrances to the channel will be 100 mètres in breadth, diminishing to 22, and the depth 8 mètres. According to studies made by M. Gerster, the total quantity of material to be extracted will be about 9,835,000 cubic mètres. The nature of the ground through which this channel has to be cut is composed, according to the report of the engineers of the company, of three distinct kinds: Firstly, from the Gulf of Corinth, through a plain, consisting of sand and alluvial soil, for a distance of 1½ kilomètres; secondly, through a mountain range, varying in height from 40 to 80 mètres, of the length of 4½ kilomètres; thirdly, beyond the mountain range to the sea, in the Bay of Calamaki, the proposed canal will traverse a little plain of the length of 600 mètres, composed of alluvial soil and rocks. The excavation of those parts of the canal situated in the plains presents no difficulties; but this is not the case as regards the mountainous parts, where an enormous mass of 8,000,000 mètres of solid rock will have to be excavated and transported to a distance, which labour, according to the contract, has to be done within three years. The following plan of executing the work has been decided on by the engineers of the company, M. Gerster and M. Kausser: That part of the canal situated in the plains will be excavated by ordinary means—namely, hand labour, dredging machines, a railway, and sand pumps. This portion of the labour, it is calculated, will be finished at the end of the present year, 1883. At the same time as the above-mentioned work is in progress, the upper portion of the rocky crest will be excavated by



mines, and the refuse carried away by a railway, for which purpose four locomotives and 200 trucks will be employed. Towards the end of the year 1883 several large dredging machines, constructed on the most approved modern principles, will be delivered to the company. These machines will be capable of removing 5,500 cubic metres of soil in ten hours. They will be each of 300 horse-power. As regards the system of excavating the rock, M. Gerster's plan is to sink vertical shafts in the mountain, by means of perforating machines constructed expressly for the purpose, which shafts will be sunk to the level of the proposed canal, for which cartridges of dynamite will be employed at distances of two to three metres from each other, which will be exploded simultaneously. The execution of this enterprise has been confided to the Société des Ponts et Travaux en Fer (ancienne maison Joret et Cie.) in conjunction with L'Association des Constructeurs. These two companies engage to undertake the cutting of the canal for the sum of 24,600,000 frs., under forfeit if it is not completed within the prescribed time.

### GLASGOW ARCHÆOLOGICAL SOCIETY.

THE annual excursion of the Glasgow Archæological Society took place on the 20th inst. Following the precedent of former years, the members went somewhat far afield. In 1881 Dumfries and Caerlaverock Castle were visited, and last year Murthly Castle and Dunkeld Cathedral. This year the programme promised Doune Castle, the Roman camp at Ardoch, and the Leighton library and cathedral, Dunblane. At Bridge of Allan the members left the train, and drove thence to Doune Castle, which is at present under restoration by Mr. A. Kerr, of Edinburgh. An interesting paper was read by Mr. Dalrymple Duncan descriptive of the castle and illustrative of its history. The exact period of the erection of Doune Castle, he said, cannot now be ascertained with accuracy. Tradition ascribes its origin to the eleventh century, but there is no proof of this or of its having been the residence of the old earls of Menteith. With Doune Castle the historic name most closely linked is that of Robert Stewart, first Duke of Albany, Regent of Scotland from 1402 to 1419, who lived there frequently, as is proved by the fact that there are extant at least six charters under the Great Seal granted by him at Doune. The sixth of these is in favour of the famous Earl of Buchanan, the Wolf of Badenoch. The foundation of the castle is usually ascribed to Murdoch, the younger Albany, but it seems more reasonable to suppose that the work was undertaken by his energetic and strenuous sire. Doune was a favourite residence of Murdoch, and when in 1424 he was seized by order of James I. at a ford between Doune and Dunblane, long afterwards known as Menteith's Ford, it is probable that he was on his way to his stronghold of Doune Castle. The castle was seized by the king, who, finding there Albany's wife, imprisoned her in Tantallon Castle. Doune now became a royal possession, and was frequently settled upon queens and royal ladies as part of the bridal possession. Through Margaret Tudor's union with Lord Methven, the castellanship of Doune and stewardship of Menteith was bestowed upon Methven's younger brother, Sir James Stewart, of Beith. In later days the murder of the "Bonnie Earl of Moray" threw the glamour of ballad fame around the castle, where his consort so hopelessly awaited his return. In 1745 Doune Castle was garrisoned by a party of Jacobites, commanded by Stewart of Ballochallan. Sir Walter Scott, in "Waverley," names Doune Castle as the place to which his hero was conducted by Donald Bean, and the castle is further notable for the circumstance that Home, the author of "Douglas," and five other students of Edinburgh University, who had been captured by the Highlanders after the rout of Falkirk, were brought here as prisoners of war. They were lodged near the top of the castle, in a chamber still in good preservation, which was visited with much interest by the party of archæologists. The students made their escape, under circumstances of great peril, through a window. After the Jacobites quitted the castle the Government sent an engineer to survey it, but his report on its use as a fortress does not seem to have been favourable, and it has still remained a picturesque ruin.

From Doune Castle the members drove eleven miles further on to Ardoch House, where Mr. Matthew Bulloch entertained a large party to luncheon. Mr. John Honeyman and Bailie Wilson conveyed to Mr. Bulloch the thanks of the society for his kindness in welcoming the members, and the hospitality with which they had been received. Mr. Bulloch then conducted the party to the Roman camp, which was briefly described by the Rev. Mr. Macintyre. Owing to the lateness of the hour the greater number of the members were obliged to return to Bridge of Allan without visiting Dunblane Cathedral; but a small party, under the guidance of Mr. Honeyman, examined its many points of architectural interest. Thereafter the society dined together in the Queen's Hotel, Bridge of Allan, Mr. C. D. Donald, jun., F.S.A. Scot., in the chair.

The Site of the City of London School in Honey Lane Market has been sold for 61,750/.

### CHURCH BUILDING AND RESTORATION.

**Mursley.**—A new Baptist chapel has been opened here, to accommodate about 150 persons. It has a gabled front, a small vestry-room over lobby, built with dark red and blue bricks, with red string courses, stone heads and transoms to doors and windows, with stone coping and terminals to parapet walls, patent ventilators in roof, with provision in walls and windows to admit ventilators without downward draught. It has been erected by Mr. J. W. Ingram, builder, of Winslow, from the plans of Mr. Leete, of Luton.

**Southover.**—An appeal for funds for the enlargement of Southover church has been issued. It is proposed to build a chancel, extending the church eastward according to its former design, and to re-seat and generally restore it. The estimated cost of these alterations, which will be carried out from the plans of Mr. B. Ingelow (Messrs. Carpenter & Ingelow), ranges from 1,500/ to 2,000/.

**Leeds.**—The parish church has been reopened, after being closed during the last few months for the purpose of alterations. The alterations embrace the rebuilding of the organ, enlargement and erection of vestries, and the repainting and cleaning of the church. The internal arrangements have also been considerably improved. In connection with the old parish vestry, a large fire-proof safe, for the reception of the registers, has been built; it is lined throughout with glazed bricks, has iron shelves, and is fitted with one of Chatwood's doors. The clergy vestry has been enlarged to about three times its previous size, suitable conveniences added, and an entrance door provided on the south end of the church. The alterations have involved an outlay of 3,800/. The work has been carried out, under the direction of Mr. C. R. Chorley, architect, by Messrs. Dreyer & Co., painters, Hull; Mr. A. W. Blacker, Royal Marble Works, Torquay; Messrs. Franks & Evans, Leeds, contractors for the cleaning and scaffolding; Mr. Joe Lindley, plumber, Leeds; Messrs. Nelson & Son, Leeds, ironwork; and Mr. John Hall Thorpe, Leeds, joiner's work.

**Stranraer.**—The foundation-stone of a new church for St. Leuchar's Free Church congregation was laid on Saturday. The church, which is being erected in King Street, is in the Gothic style, and is estimated to cost a little over 2,000/. Mr. M'Lachlan, Edinburgh, is the architect.

**Burton-on-Trent.**—A new Baptist chapel has been opened, having been erected at a cost of about 5,000/. The building is designed in thirteenth century style, and in plan is cruciform. The total internal length of the nave is 90 feet, and the breadth across the transepts is 75 feet. Externally, the building is of red brick, with dressings of Ancaster stone and moulded brick, the roof being covered with Broseley tiles. The intersection of the roofs of the nave and transepts is marked with a *flèche* of wood and tile, rising to a height of 90 feet above the pavement. The work has been executed from the designs and under the superintendence of Mr. J. Wallis Chapman, of London, the clerk of works being Mr. Reading. Messrs. Lowe & Sons were the contractors, and associated with them were Messrs. Pickering Bros. for the plumbing, painting, and glazing, and Messrs. Mason for the woodwork.

**Horsham.**—The memorial-stone of a new Congregational church at Horsham was laid on the 18th inst. The building is designed in the Gothic style, and will cost about 2,200/1. Mr. W. Buck is the architect, and Mr. J. Longley, of Crawley, the builder.

### SCHOOL BUILDINGS.

**Bedford.**—The new schools belonging to the Wesleyan chapel, St. Paul's, have been opened. The building is Classic in style, in harmony with the surroundings. The materials used are Henlow red facing bricks, with Fareham brick rubbers to the pilasters, panels and reveals with Bath stone dressings and cornices. The basement contains a large kitchen, fitted with sinks, dressers, &c., room containing the boilers for the heating apparatus, together with store-room, &c. The ground-floor is entered by lobbies and corridors leading to a large infants' room, 30 feet by 20 feet, and fitted with gallery; a committee or Bible-class room 21 feet by 14 feet, five large class-rooms, ladies' retiring-room; on this floor are fitted lavatories, and offices for the children. The floors are laid with solid wood blocks, which materially add to the quietness and warmth. The large assembly-room, which is approached by two wide staircases, one at either end, and fitted with Hawkesley's patent noiseless treads, is 71 feet by 33 feet, the acoustic properties being good. The roof is open to height of purlins, and divided into panels by principals. The room is lighted by three large windows in front and fourteen at the sides. Special attention has been given to ventilation, fresh air being admitted by Tobin's tubes and the foul air extracted by Boyle's air-pump ventilators. A lift is fitted from the basement to both floors. The building has been carried out from the designs of Messrs. Usher & Anthony, architects, St. Paul's Square, and under the personal superintendence of Mr. Anthony. The contractors were Messrs. Warton & Walker



for the bricklayer's and plasterer's work, Messrs. Jarvis & Son stonemasons, Mr. H. Adams the carpenter's and joiner's work, plumbing, glazing, and painting by Mr. Bull, gas fittings and smith's work by Mr. E. L. Moulton, all of Bedford. The lift was fitted by Messrs. Waygood & Co., of London, and the heating apparatus by Mr. A. Marriott, of Higham Ferrers. The total cost was 2,500*l*.

**Freckleton, Preston.**—A new Wesleyan chapel, school, and class-rooms are about to be erected at Freckleton from the plans of Mr. David Grant, architect, Preston.

**Wycombe.**—The new grammar-school buildings erected at Wycombe, from the designs of Mr. Arthur Vernon, have been opened. The buildings, which have an extensive frontage, are in an Early English style, with indications in the semicircular arches, dog-tooth and zigzag enrichments, of a semi-Norman character. The façade is of white Gault bricks, relieved by dressings of warm red brickwork, of local manufacture, and the roofing is of Broseley tiles. The general entrance is by a porch under a turret. Passing through a large hat and coat lobby, a spacious corridor is reached, which runs through the centre of the whole building. A schoolroom 50 feet by 20 feet, designed to accommodate 100 boys, is at one end of the corridor, and adjoining on the other side are class-room and master's room, the latter capable of use as a small class-room, if desired. A large lavatory for the use of either boarders or day scholars, with provision for play-boxes, boots, and shoes, &c., adjoins the garden lobby, which gives entrance to the grounds in the rear. In front there is a common hall or dining-room for the use of boarders, 30 feet by 18 feet. On the floor above, approached by a fireproof staircase, are three dormitories, lavatory, master's bedroom, bath-room, &c. The master's house is divided on both floors from the schoolroom proper by folding-doors in the central corridors. On the ground-floor of this private part of the building are an entrance vestibule, hall, library 18 feet by 14 feet, dining-room 18 feet by 16 feet 6 inches, drawing-room 21 feet by 15 feet, butler's pantry, lavatory, lift, &c. The first floor contains five bedrooms, dressing-room, linen-room, &c.; the second floor, two bedrooms, and an isolated sick ward.

### GENERAL.

**The Liver Sketching Club, Liverpool,** opened its eighth annual exhibition of pictures on Saturday last. The number of works exhibited amount to 296.

**An Oil Painting** has been found rolled together behind the wainscot in the little country house of Blankenheim, in Rhenish Prussia, which is supposed to be the Raphael which belonged to the Düsseldorf Gallery about one hundred years ago, and was lost on its way to Munich about the year 1805.

**Mr. J. Honeyman, F.R.I.B.A.,** has been appointed architect for the new parish church of Lochgilphead, N.B.

**An Association** has been started under the title of the Art for Schools Association, under the patronage of Lord Aberdare, Mr. Mundella, Mr. Forster, Mr. John Morley, Sir Frederick Leighton, Mr. Matthew Arnold, and Mr. Robert Browning, to bring within the reach of pupils in Board and other schools such a measure of art culture as is compatible with their age and studies.

**The Second Place** in the competition for the Infectious Hospital, Newcastle-on-Tyne, has been given to the design marked "Isolation A and B," which is the joint work of Messrs. Mark J. Lansdell and J. H. Leverton.

**The Archbishop of York** and Miss Thompson have presented the newly-built parish church of Whitehaven with a handsome stained-glass memorial east window, the work of Mr. W. F. Dixon, of London.

**The New Chancel** at the Priory church of Upholland, near Wigan, erected from the designs of Mr. Basil Champneys, was opened on Monday.

**A Tower** is proposed to be erected to St. John's Church Accrington.

**A Pulpit,** designed by Messrs. Medland & Henry Taylor, and executed by Mr. Thomas Scott, has just been erected in St. Paul's Church, Oldham Road, Manchester.

**Dr. Schliemann,** who, with his family, has made a short stay in England, in connection with his forthcoming book on the larger city of Troy, has left England again *en route* for Athens.

**Nether Court Hall.**—In the description of this work, published last week, the owner's name should have been Mr. Henry T. Tubbs.

**At the Industrial Exhibition** which will take place at Turin next year, there will be a Mediaeval castle and village, reconstructed by local artists after studies made of the venerable and picturesque ruins that exist at Canavese and in the valley of Aosta. The castle and village, the foundations of which already begin to appear on

the left bank of the Po, will represent a page of the civil and military life of Piemonte in the fifteenth century. At that time Turin was very small, counting scarcely 10,000 souls. The city of the Toro owed its relative greatness and prosperity to the victorious enterprises of Emanuele Filiberto, the greatest of the Savoy princes, who first made Turin a royal residence, and embellished and fortified the city.

**The British Association,** which concluded its congress on Wednesday, will meet next year at Montreal, on August 27.

**The Brighton Corporation** opened their tenth annual exhibition of modern paintings on Wednesday. Nearly 500 works are exhibited.

**Works of Restoration** on a scale of magnitude are to be commenced at the Royal Palace of Laeken.

**The New Post Office and Bank at Leiston,** erected from the designs of Mr. Coe, architect, of London, have just been completed.

**Mr. H. W. Pendred** will read a paper on "Designs, Specifications, and Inspection of Ironwork" at the ordinary meeting of the Society of Engineers on Monday next.

**Sir John Steel's** reproduction in bronze of his group of *Alexander and Bucephalus* is proposed to be erected within the enclosure of St. Andrew Square, Edinburgh, at a point where it would look along George Street, and be seen in profile in approaching from North or South St. David Street.

**Messrs. Ives & Co.,** of Shipley, the builders of the proposed new post-office at York, have commenced operations for clearing the site in Lendal.

**Mr. C. H. Lowe,** surveyor to the Hampstead vestry, reports that the length of roads, &c., under the control of the vestry is 39 miles 366 yards. The number of newly-inhabited houses during 1882 was 369.

**A Meeting of the City Commissioners of Sewers** was held on Tuesday at the Guildhall, when the report of the committee on electric lighting was adopted, recommending that certain experiments be made at a cost of 200*l*, with a view to determine the best distribution of incandescent lamps of the proper intensity of light, so that the companies tendering might have before them definite figures to guide them in fixing their prices.

**Sir J. A. Picton** has just issued a volume entitled "Notes on the Regalia and Plate belonging to the City of Liverpool." Sir James states that the plate has been again and again melted down and made afresh into new patterns to suit the taste of the authorities of the day. It is impossible now to say how much of this old plate was of a kind that would have been worth keeping.

**The Arlberg Railway Works** are being carried out with rapidity. The tunnel is now within 1,180 metres of completion, and the boring will probably be finished by the end of October, and the line opened for traffic in the course of 1884. The total length of the great tunnel will be 10,270 metres—nearly six and a half miles.

**A High Level Bridge,** crossing the river Aar, and connecting the existing town of Berne with the district known as the Kirchenfeld Lindenfeld, was opened on the 24th inst. The land thus connected with the old town of Berne has been acquired by an English company, and is being laid out for building purposes. It comprises about 200 acres, and commands magnificent views of the Bernese Oberland.

**Subscriptions** are being made for protecting and preserving Nevill's Cross, near Durham. The remains of the cross still existing consist of a rubble foundation, supporting a large stone, square at the base and octagonal at the top, and having at the angles of transition four sculptured heads representing those of the evangelistic symbolic figures. The base originally carried the shaft of the cross, the socket for which now contains a rude upright stone.

**The Manchester Corporation** have made a gross profit on the year's gas working of 99,489*l*, and after paying interest on loans and cost of lighting the streets, are able, by taking 12,000*l* from the reserve fund, to make a grant of 52,000*l* towards the cost of public improvement.

**The "Panama Star and Herald"** says that a head taken from a monolith at Tiahuanaco has been erected in La Paz, Bolivia. Some time ago General Ballivian attempted to transport the monolith intact, but, after removing it some distance, the work was found to be difficult, and the effort was given up. This stone is eight metres in length. The head which has been taken to La Paz weighs 2,700 lbs. It must be remembered that the ruined city at Tiahuanaco is celebrated for the massive nature of the stones employed in the erection of its temples, fortresses, and houses. In one of the walls there is a gigantic mass of rock which has been carefully measured and proved to weigh 250,000 lbs., or 125 short tons. Who were the builders and how they contrived to handle these enormous masses of rock remain enigmas to the present day, although fancy and tradition have been busily employed endeavouring to solve them. Tiahuanaco is situated in Bolivia on the south shore of Lake Titicaca, the largest and deepest



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, SEPTEMBER 29, 1883.

### TENDERS, ETC.

*\* \* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\* \* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

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### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accom-

panied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

**OLDHAM.**—Oct. 1.—Plans for Schools for the Union, to Accommodate 120 Boys, 120 Girls, and 60 Infants. The building to be a separate one, in an enclosed area, to contain three schoolrooms, dormitories, baths, kitchen, with cooking arrangements; dining-hall to hold 500 persons, to be arranged so as to be usable for religious service; and four sitting-rooms and four bedrooms for officers. Mr. J. W. Mellor, Oldham, Clerk to the Board.

### CONTRACTS OPEN.

**ASHURST.**—For Erection of Houses. Mr. T. A. Skelton, Architect, Portland Street, Southampton.

**BELFAST.**—Sept. 29.—For Construction of Reservoir, &c., for Supply of Water to Mill. Mr. W. Hastings, Victoria Hall, Belfast.

**BISHOP AUCKLAND.**—Oct. 2.—For Building Stable and Coachhouse. Mr. T. Bowness, Eagle Printing Works, Durham Chare, Bishop Auckland.

**BLACKBURN.**—Sept. 29.—For Building First Portion of St. Silas' Schools. Mr. J. Bintley, Architect, Kendal.

**BROMLEY.**—Oct. 5.—For Building Small Brick Bridge, &c. Mr. John Ladds, Architect, 4 Chapel Street, Bedford Row, W.C.

**BRYMBO.**—Oct. 4.—For Out-offices, Drainage, &c., at National Schools. Mr. Alfred C. Baugh, Architect, Egerton Street, Wrexham.

**BURNLEY.**—Oct. 1.—For Enlargement of Wesleyan Schools. Messrs. Wm. Waddington & Son, 5 Grimshawe Street, Burnley.

**COCKERMOUTH.**—Oct. 3.—For Construction of Three Water Tanks. Messrs. Pickering & Crompton, C.E., Whitehaven.

**COLCHESTER.**—Oct. 9.—For Building Class-rooms, Day-rooms, Dormitories, Lavatories, W.C.'s, &c., Eastern Counties Asylum for Idiots. Mr. W. R. F. Vallance, Architect, White Hart Chambers, Mansfield.

**CONGLETON.**—Oct. 2.—For Building Schoolroom, Class-rooms, Dormitories, &c., West House. Mr. Percy J. Shelton, C.E., Congleton.

**DEWSBURY.**—Oct. 8.—For Entrance and Covered Way to Industrial Hall. Mr. Henry Holtom, Architect, Bond Street, Dewsbury.

**EPSOM.**—Oct. 2.—For Fitting-up and Furnishing Infirmary. Mr. W. O. Reader, Clerk to the Guardians, Epsom.

**FAR HEADINGLEY.**—Sept. 29.—For Building Three Houses. Messrs. Smith & Tweedale, Architects, 39 Park Square, Leeds.

**GUILTCROSS.**—Sept. 29.—For Rebuilding Wing and Alterations to Workhouse at Kenninghall. Mr. Edward Boardman, Architect, Queen Street, Norwich.

**KILMARNOCK.**—Sept. 29.—For Construction of Filter at the Waterworks, North Craig. Mr. R. Blackwood, Secretary, Water Company's Office, Mill Lane, Kilmar-nock.

**LEEDS.**—Sept. 29.—For Building Shed at Holbeck Mills. Mr. Andrew Harrison, Architect, Yeadon.

**LEICESTER.**—For Building Mill, Engine and Boiler Houses, Chimney, &c. Mr. W. Beaumont Smith, Architect, Grey Friars Chambers, Friar Lane, Leicester.

**LEYTONSTONE.**—Oct. 3.—For Building Oakum and Wood-chopping Sheds. Mr. Lewis Angell, Architect to the Guardians, Leytonstone Union.

**LLANELLY.**—Oct. 1.—For Building Post Office and Shops in Cowell Street. Mr. J. B. Morgans, Cowell Street, Llanelly.

**LLANELLY.**—Oct. 6.—For Supplying and Laying 5,000 yards of Stoneware Drainage Pipes, and Construction of necessary Branches, Street Gullies, Manholes, Ventilators, &c. Mr. Geo. Watkeys, Surveyor, Town Hall, Llanelly.

**LLANISHEN.**—Oct. 12.—For Construction of Large Storage Reservoir, including Embankments, Valve-well, Culverts, Gauge-basins, Overflow, By-channel, Road, Fencing, and other works.—Mr. J. A. B. Williams, Engineer, Queen's Chambers, Queen Street, Cardiff.

**LONG REACH, KENT.**—Sept. 29.—For Building Laundry and other Administrative Offices in connection with the Hospital Ships *Atlas* and *Castalia*. Messrs. H. Jarvis & Sons, 27 Trinity Square, S.E.

**LUDDENDEN.**—Sept. 29.—For Alterations to Booth Chapel. Messrs. George Buckley & Son, Architects, Waterhouse Street, Halifax.

**MIDDLESBROUGH.**—Oct. 6.—For the Construction of a Reservoir to hold about 500,000 gallons, with the necessary Pipe Connections, Valves, Overflows, Washouts, &c. Mr. J. Mansergh, C.E., 3 Westminster Chambers, Victoria Street, S.W.

**MIDDLESBROUGH.**—Oct. 17.—For Enlargement of Dock, comprising Construction of Quay Walls, Timber Wharf, Entrance Lock, &c. Engineer-in-Chief's Office, North-Eastern Railway, Newcastle-on-Tyne.

**MIDLAND RAILWAY.**—Oct. 5.—For Building a Waggon Repairing Shop at Bromsgrove. Plans, &c., at the Engineer's Offices, Derby Station.

**MOSSLEY.**—Oct. 2.—For Alterations and Extensions to Sunday-school. Messrs. Haigh, Architects, Stamford Road, Mossley, Manchester.

**NOTTINGHAM.**—Oct. 1.—For Alterations and Additions to Workhouse Premises. Mr. A. H. Goodall, Architect, Market Street, Nottingham.

**OBAN.**—Oct. 6.—For Erection of Block of Buildings in Argyll Square. Messrs. Ross & Mackintosh, Architects, George Street, Oban.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**SALTBURN.**—Oct. 1.—For Erection of Billiard-room, Coachman's House, &c. Messrs. Smith & Tweedale, Architects, 39 Park Square, Leeds.

**SHEERNESS.**—Oct. 5.—For Building Three Houses, High Street. Mr. Copland, Solicitor, Sheerness.

**SHEFFIELD.**—Sept. 29.—For Construction of Arches, Culverts, Retaining Walls, and Works for Road, Crooke's Moor Valley. Mr. R. Davidson, Borough Surveyor, Sheffield.

**SLESDEN.**—Oct. 13.—For Building Mechanics' Institute. Mr. J. B. Bailey, Architect, North Street, Keighley.

**STOURBRIDGE.**—Oct. 8.—For Works of Sewerage. Mr. Harry Mills, Clerk to the Board, 118 High Street, Stour-bridge.

**SWANSEA.**—Oct. 9.—For Schoolroom, Class-rooms, &c. Messrs. E. Roberts & Son, 40 Oxford Street, Swansea.



TORQUAY.—Sept. 29.—For Erection of Mansion, Stables, and Cottage at Shipway. Mr. E. H. Harbottle, Architect, Exeter.

TOTTENHAM.—Oct. 2.—For a Concrete Invert along the Line of the Moselle Brook, Broad Lane. Mr. De Pape, Engineer, Board's Offices, Coombes Croft House, High Road, Tottenham.

TREHERBERT.—Oct. 1.—For Building Wesleyan Chapel, Mr. W. L. Goldsworthy, Treherbert.

## TENDERS.

## ACTON.

For the Construction of Works of Water Supply for the Township of Acton, Northwick. Mr. H. J. BENNETT, Surveyor.

Heaps, Liverpool	£761 0 0
Dale, Northwick	689 0 0
Evans Bros., Wolverhampton (accepted)	667 0 0

## BATH.

For Erection of Royal Schools, Bath. Messrs. W. G. HABERSHON & FAWCKNER, Architects, 38 Bloomsbury Square.

Birth & Co., Bath	£11,027 0 0
Long, Bath	10,950 0 0
Bladwell, Bath	10,600 0 0
Cowlin & Co., Bristol	9,928 0 0
Hayward & Co., Bath	9,849 0 0
Jones & Co., Gloucester	9,844 0 0

## BATLEY.

For Additions to Batley Grammar School. Mr. WALTER HANSTOCK, Architect, Batley. Quantities by the Architect.

## Accepted Tenders.

Williams, Birstal, joiner	£270 0 0
Lay, Birstal, mason	263 10 0
Wright, Batley Carr, plumber	73 12 0
Thornton, Heckmondwike, slater	45 17 0
Morton, Cleckheaton, plasterer	19 10 0

## BEDFORD.

For the Making of Roads, Footpaths, Sewers and Man-holes on the St. John's Hospital Estates, Bedford. Messrs. USHER & ANTHONY, Surveyors.

St. Peter's Estate.

FREEBOROUGH (accepted).

St. Paul's Estate.

SPENCER (accepted).

## BO'NESS.

For Building Public School, Kinneil, for the Bo'ness School Board. Mr. WILLIAM SIMPSON, Architect, Stirling.

## Accepted Tenders.

Peattie, Bo'ness, mason	£669 0 0
Johnston, Polmont, joiner	349 5 3
Patrick & Boyd, Bo'ness, slater	93 1 6
McKenacher, Bo'ness, plumber	82 8 0
Ferguson, Bo'ness, plasterer	69 1 9
Cochrane, Bo'ness, smith	25 11 6
Crichton, Stirling, glazier	11 0 0

## CARDIFF.

For Building Mission Chapel, Clive Road, Canton, Cardiff. Mr. J. P. JONES, Architect, 26 Park Street, Cardiff. Quantities by the Architect.

Williams	£595 12 0
Davis	580 0 0
Lewis	566 0 0
Walters	562 10 0
Thomas & James	550 0 0
SMITH (accepted)	545 16 0

For Erection of Boundary Wall, Stone Staircase, and other work, at Ely Schools, Cardiff. Mr. C. E. BERNARD, Architect. Quantities by Mr. S. Rooney.

Brown, Cardiff	£1,600 0 0
Shepherd, Cardiff	1,332 0 0
Thomas, Cardiff	1,300 0 0
Jones Bros., Cardiff	1,300 0 0
Davies, Cardiff	1,295 0 0
Jeffries, Cardiff	1,281 1 6
Hames, Cardiff	1,260 0 0
Bird, Cardiff	1,239 0 0
Cox, Llandaff	1,237 6 0
DUNN, Cardiff (accepted)	1,160 0 0
Rees, Ely (wall only)	800 0 0

## CHATHAM.

For Erection of St. Paul's Schools, Chatham. Mr. ROBERT WILLEY, F.R.I.B.A., Architect, 66 Ludgate Hill, E.C.

Piercy & Co., Westminster	£2,200 0 0
Martin, Wells & Co., Aldershot	2,000 0 0
Pankhurst & Co., Chatham	1,895 0 0
Green, Clapton	1,859 0 0
Blake, Gravesend	1,840 0 0
Naylor & Son, Rochester	1,773 0 0
Skinner, Chatham	1,580 0 0
Dorey, Brentford	1,350 0 0

## CHISLEHURST.

For the Erection of Stable and Coachhouse at Sandfield, Chislehurst, Kent, for Mr. G. S. Hunt. Mr. RICHARD CREED, F.R.I.B.A., Architect.

Lowe, Chislehurst	£685 0 0
Copeland, Beckenham	669 1 6
Barnett, Shortlands	639 0 0
Grubb, Bromley	629 0 0
Taylor, Croydon	625 0 0

## CLWT-Y-BONT.

For Heating Disgwylfa Chapel, Clwt-y-Bont, with their "Small Tube" (Registered) Hot-water Apparatus. JOHN KING (Limited), Liverpool.

## CLYNDU.

For Building Board School at Clyndu. Mr. JOHN HUMPHREY, Architect. Quantities by the Architect.

Rees	£2,099 0 0
Thomas, Watkins & Jenkins	2,086 0 0
WALTERS & JOHNS (accepted)	2,075 0 0

## DEVONPORT.

For the Construction of Intercepting Sewer (3,700 feet) along Stoke Road and Deadlake Lane, Devonport.

Shaddock, Saltash	£2,927 0 0
Martin, Devonport	2,700 0 0
Mackay, Princetown	2,490 0 0
HAWKINS, Dawlish (accepted)	2,450 0 0

## FENTON.

For Erection of Buildings in connection with the Gas-works, Fenton. Quantities by the Engineers, Messrs. G. W. STEVENSON & SON, Mr. S. A. GOODALL, Surveyor to the Local Board.

Gallimore, Newcastle	£6,731 4 2
Drewitt, Alsager	6,636 0 0
Hartley, Birmingham	6,393 0 0
Garlick, Birmingham	5,468 6 0
Barlow, Stoke-on-Trent	5,240 0 0
Hancock & Tipping, Stoke-on-Trent	5,133 0 0
Bromage, Stoke-on-Trent	4,771 0 0
Gibson, Tunstall	4,658 1 8

## GRIMSBY.

For the Erection of a new Vicarage House for the Parish of St. Andrew, Great Grimsby. Messrs. E. W. FAREBROTHER, A.R.I.B.A., & R. A. ROBERTSON, Architects, Grimsby.

Willows & Roebuck	£1,910 0 0
Smith	1,900 0 0
Snowden	1,880 0 0
Nightingale and Danby	1,695 15 6
RIGGALL & HEWINS (accepted)	1,653 1 0

## GROSMONT.

For Erection of Farmhouse and Outbuildings, Grosmont.

Harrison, Glaisdale	£449 15 6
HUTCHINSON, Sleights (accepted)	278 10 0

## GUIDE BRIDGE.

For Additions and Alterations to Drying-room at Shepley Mills, Guide Bridge, for the Shepley Mills Linoleum Company (Limited). Mr. JAS. HUNT, Architect, 4 Warren Street, Stockport.

Broadhurst, Stockport	£2,029 0 0
Froggatt & Briggs, Heaton Norris	1,788 0 0
Storrs & Sons (Limited), Stalybridge	1,689 0 0
Robinson, Hyde	1,637 0 0
Simpson, Hyde	1,634 0 0
Statham & Sons, Manchester	1,615 0 0
HAUGHTON, Godley (accepted)	1,605 0 0

## HEREFORD.

For the Erection of Show Rooms between Commercial and Union Streets, Hereford, for Mr. R. M. Harding. Mr. W. W. ROBINSON, Architect, 21 King Street, Hereford. Quantities supplied by the Architect.

Pensom	£1,235 0 0
Welsh	1,048 0 0
Hiles	1,025 0 0
Lewis (accepted)	1,021 0 0
Bevan & Hodges	1,020 0 0
Bowers & Co.	1,010 10 0
Davies	895 0 0

For Ten Houses for the Hereford Land, House, and Investment Company (Limited). Mr. W. H. WILLETT, Architect.

Inwood, Malvern	£1,350 0 0
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For Six Houses in Ledbury Road, Hereford. Mr. W. H. WILLETT, Architect.

Ford	£1,009 0 0
Bowers & Co.	925 0 0
Lewis	900 0 0
Welsh	895 0 0
DAVIES, Hereford (accepted)	856 0 0

For Two Houses on Lot 68, the Ryelands Estate, Hereford (exclusive of bricks). Mr. W. H. WILLETT, Architect.

Inwood	£690 0 0
Hudson	456 0 0
Powell	405 10 0
Davies	395 0 0
Welsh	380 0 0
Bowers & Co.	340 0 0
PRITCHARD (accepted)	318 0 0

For Two Houses on Lot 153, the Ryelands Estate, Hereford (exclusive of bricks). Mr. W. H. WILLETT, Architect.

BOWERS & CO. (accepted)	340 0 0
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For Alteration to Shop in High Town, Hereford, for Mr. J. J. Cox. Mr. W. H. WILLETT, Architect.

FORD (accepted)	850 0 0
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For Alterations and Additions to House at Putson, Hereford, for Mr. J. J. Cox. Mr. W. H. WILLETT, Architect.

FORD (accepted)	£150 0 0
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For Alterations to Shop, 1 Palace Yard, Hereford, for Mr. Laphora. Mr. W. H. WILLETT, Architect.

Lloyd	£60 0 0
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For New Shop Front and Alterations at 59 Commercial Road, Hereford. Mr. W. H. WILLETT, Architect.

FORD (accepted)	£115 0 0
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For Cottage, Broome Hill, Hereford. Mr. W. H. WILLETT, Architect.

WELSH (accepted)	£239 0 0
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## HEXHAM.

For Alteration of Hinds' Cottages, Prendwick Farm. Mr. C. O. HODGES, Architect, Hexham.

DRYDEN & SON, Glanton (accepted)	£697 0 0
Fortune, North Sunderland	530 17 0

## HIGHAM.

For Erection of Eight Cottages at Gad's Hill, Higham, Kent. Messrs. SANDALL, CORDEROY & SELLEY, Surveyors.

Barber & Williams, Peckham	£1,120 0 0
Knight, Sidcup	1,100 0 0
Bishop Brothers, Maidstone	1,098 0 0
Bridel, Greenwich	1,040 0 0
Widarspin, Bromley	1,017 0 0
Laing, Wandsworth	1,008 0 0
Abridge & Jenvey, Peckham	997 0 0
Pyle & Co., Herne Hill	980 0 0
WOOTTON, Fenge (accepted)	540 0 0

## LEICESTER.

For Alteration of the Premises of the United Medical Association, Leicester.

Holmes	£116 14 0
Robinson	113 10 0
Kempin	109 10 0
Bland	107 0 0
Turner	100 0 0
Riddett	99 0 0
Stevens	86 8 0
Rudkin	85 14 0
PLANT (accepted)	81 0 0

## LEWES.

For Works of Improvement, St. John's Church, Lewes.

ROWLAND & SON (accepted)	£500 0 0
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## LONDON.

For new Bath-room, Decoration, &c., 98 Gloucester Place, Portman Square. Mr. E. CROSSE, Architect.

Higgs & Hill	£244 0 0
Sayer	207 0 0
Wright & Co.	180 0 0
RHODES (accepted)	176 0 0

For Sanitary Works in Drainage and Water Supply to 13 Blandford Square, for Mr. H. F. Amedroz. Mr. THOS. DURRANS, Architect, 44 Upper Baker Street.

Moss	£571 0 0
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For Alterations and Additions to Premises, No. 121 Euston Road, W.C., for Mrs. Lumley. Messrs. J. SAVILLE & SON, Architects, 1 Argyle Square, W.C. Quantities supplied.

Royal	£488 0 0
Dorey	479 0 0
Steed Bros. (too late)	447 0 0
Spencer & Co.	440 0 0
Jackson & Todd	424 10 0
S. R. Lamble	419 0 0
WARD & LAMBLE (accepted)	417 0 0

For Erection of a Building on a Site in Laurence Pountney Hill, E.C., for the City of London Real Property Company. Mr. R. B. MARSH, Architect.

Woodward	£29,520 0 0
Kilby & Gayford	29,200 0 0
Bywaters	28,367 0 0
Chappell	28,100 0 0
Ashby & Horner	26,500 0 0
Hall, Beddall & Co.	26,473 0 0
Brass	26,273 0 0
Morter	26,125 0 0
Bangs	26,070 0 0
Conder	26,985 0 0
Lawrance	26,375 0 0

For Superstructure of New Building on the Site of the Woolpack Tavern, in Corbett Court and St. Peter's Alley, and Nos. 3, 4, and 5 Gracechurch Street, for Messrs. Lee & Chapman. Mr. THOS. DUDLEY, Architect. Mr. M. W. King, Surveyor.

Ashby Bros.	£24,845 0 0
Ashby & Horner	24,560 0 0
Conder	24,484 0 0
Peto Bros.	24,249 0 0
Brass	23,500 0 0
Grover	23,297 0 0
Patman & Fotheringham	23,189 0 0
Greenwood	23,162 0 0
Lawrance	22,920 0 0
Morter	22,850 0 0
Sheppard	22,844 0 0
Perry & Co.	22,721 0 0
Bangs	22,190 0 0

For the Erection of New Warehouse, Ingram Court, Fenchurch Street, City, E.C., for Mr. C. I. Knowles. Mr. THOS. BLASHILL, Architect.

Downs	£13,214 0 0
Colls & Sons	12,995 0 0
Wood	12,983 0 0
Dove Bros.	12,875 0 0
Mowlem	12,675 0 0
Ashby & Horner	12,378 0 0
Conder	12,117 0 0

## MONKWEARMOUTH.

For Paving Works, Portobello Lane, Monkwearmouth, Sunderland. Mr. R. S. ROUNTHWAITE, Borough Surveyor.

Wright & McLaren, Sunderland	£916 16 0
Allison, Whitburn	846 0 0
Batch & Co., Norwich	599 0 0
JACKSON, Newcastle-on-Tyne (accepted)	557 0 0

## NEWPORT.

For Alteration of Wesleyan Chapel, Newport, Mon., into Shops, &c. Mr. BENJAMIN LAWRENCE, Architect.

MORETON & BROWNSCOMBE (accepted)	£1,100 0 0
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For Semi-detached Houses, Stowe Park Estate, Newport, Mon. Messrs. A. O. WATKINS & SON, Architects. Quantities by the Architects.

Linton	£2,475 0 0
Martin	2,425 0 0
Williams	2,410 0 0
Blackburn	2,395 0 0
Jenkins	2,390 0 0
Moore & Son	2,088 0 0
Prosser	2,075 0 0



**NEWPORT—Continued.**

For New Shops for Messrs. Reynolds & Co., Commercial Street, Newport, Mon. Messrs. A. O. WATKINS & SON, Architects. Quantities by the Architects.  
Bowers, Hereford . . . . .£3,904 0 0  
Forse, Bristol . . . . .3,450 0 0  
MORRIS, Newport (accepted). . . . .3,300 0 0

**NORTHAMPTON.**

For the Erection of a Residence for the Right Rev. Arthur Riddell, D.D., Lord Bishop of Northampton. Mr. S. J. NICHOLL, Architect, 1 Caversham Road, London, N.W. Quantities supplied by Messrs. Stoner & Sons.

*Accepted Tenders.*

Finnegan, Northampton.

*Masonry.*

Anstey, London.

**NOTTINGHAM.**

For Building a Warehouse, Halifax Place, Nottingham. Mr. J. BINDON CARTER, Architect, 43 Park Row, Nottingham.

Lang . . . . .£4,903 7 6  
Lynam & Kidd . . . . .4,500 0 0  
Middleton . . . . .4,500 0 0  
Hodson . . . . .4,444 0 0  
Underwood . . . . .4,411 0 0  
Wheatley & Maule . . . . .4,350 0 0  
Jelley & Co. . . . .4,300 0 0  
Messom . . . . .4,297 0 0  
Taylor & Ward . . . . .4,210 0 0  
WOOLL BROS. (accepted) . . . . .4,170 0 0

**STANNINGLEY.**

For Building Fitting Shop at Stanningley. Mr. JOWETT KENDALL, Architect. Quantities by the Architect.  
Johnson, Fartown, joiner . . . . .£136 0 0  
Dennison, Undercliffe, mason (labour only) . . . . .52 0 0  
Bannister, Pudsey, plumber, &c. . . . .45 10 0  
Thornton, Eccleshill, slater . . . . .45 0 0  
Gibbons, Pudsey, plasterer . . . . .10 9 0

Total . . . . .£288 19 0

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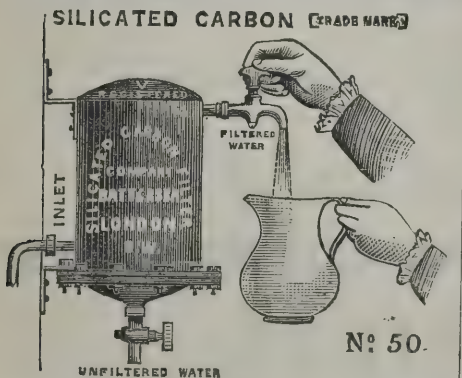
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GLEESON, Sunderland (accepted) £3 11s. each.

For Additions and Alterations to the Premises, 42 Fawcett Street, Sunderland, for the Industrial and Provident Permanent Building Society. Mr. MARTIN GREENER, Architect. Quantities supplied by Mr. G. D. Irwin, 32 Fawcett Street, Sunderland.

Thompson & Sons . . . . .£2,797 11 0  
Hirst & Sons . . . . .2,723 10 0  
Hudson, jun. . . . .2,720 0 0  
Shaftoe . . . . .2,543 10 0  
ALLISON (accepted) . . . . .2,387 0 0

For Additions and Alterations to the Premises, 34 Fawcett Street, for the Sunderland Gas Company. Mr. MARTIN GREENER, Architect. Quantities supplied by Mr. G. D. Irwin, 32 Fawcett Street, Sunderland.

Thompson & Sons . . . . .£1,781 6 4  
Allison . . . . .1,673 0 0  
Shaftoe . . . . .1,638 17 0  
Scott & Son . . . . .1,586 14 0  
Hudson, jun. . . . .1,600 0 0  
D. & J. Ranken . . . . .1,475 0 0  
HIRST & SONS (accepted) . . . . .1,455 0 0

For Restoration of Portion of Hotel damaged by Fire, Sunderland. Mr. MARTIN GREENER, Architect, Sunderland. Quantities by Mr. G. D. Irwin, 32 Fawcett Street, Sunderland.

Clark . . . . .£1,088 18 0  
Brown . . . . .1,053 15 0  
Humble . . . . .1,039 0 0  
Allison . . . . .1,030 0 0  
Swinhoe . . . . .1,000 0 0  
Dunn & Co. . . . .995 0 0  
Hudson, jun. . . . .950 0 0  
Coulson . . . . .950 0 0  
Hirst & Sons . . . . .920 6 0  
Shaftoe . . . . .915 5 0  
CHRISHOP (accepted) . . . . .914 7 4

For Street Paving, Sunderland. Mr. R. S. BOUNTHWAITE, Borough Surveyor.

Wright & M'Laren, Sunderland . . . . .£2,300 0 0  
Batch & Co., Norwich . . . . .2,175 0 0  
Jackson, Newcastle-on-Tyne . . . . .2,166 0 0  
ALLISON, Whitburn (accepted) . . . . .2,049 3 3

Whin Random.  
Batch & Co., Norwich . . . . .3,499 0 0  
Jackson, Newcastle-on-Tyne . . . . .3,095 0 0  
Wright & M'Laren, Sunderland . . . . .2,774 2 3  
ALLISON, Whitburn (accepted) . . . . .2,699 4 11

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Wright . . . . .£389 0 0  
Howard . . . . .349 0 0  
Edgar . . . . .292 0 0

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For Building Board School, Maynard Road, Walthamstow. Mr. W. A. LONGMORE, Architect, 7 Great Alie Street, E. Quantities by Messrs. J. & E. Goodchild.

Russell . . . . .£11,525 0 0  
Hack . . . . .10,334 0 0  
Smith & Son . . . . .10,333 0 0  
Wood . . . . .10,170 0 0  
Reed . . . . .9,980 0 0  
Sawyer . . . . .9,972 0 0  
Thomerson . . . . .9,828 0 0  
Brown . . . . .9,790 0 0  
Bolding . . . . .9,777 0 0  
Tink . . . . .9,663 0 0  
Gregar . . . . .9,633 0 0  
Shurmur . . . . .9,640 0 0  
Evans . . . . .9,339 0 0  
Harper . . . . .9,320 0 0  
Good . . . . .9,230 0 0  
Gibbons . . . . .8,999 0 0  
Allan . . . . .8,958 0 0  
Parker . . . . .8,829 0 0  
Martin . . . . .8,815 0 0  
Wood . . . . .8,743 0 0  
SCOTT (accepted) . . . . .8,423 0 0

**WHITCHURCH.**

For Building Stable, Coach-house, &c., at Whitchurch, Hants. Mr. JOHN HILLARY, Architect.

Pike & Hutcheon . . . . .£198 0 0  
Sealey & Co. . . . .184 0 0  
Weeks . . . . .180 0 0  
Batten . . . . .175 0 0  
Broad . . . . .164 0 0  
BEALE (accepted) . . . . .163 0 0

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For the Erection of Extra Drying Closets at the Wimbledon Sanitary Laundry, Cranbrook Road, Worpole Road, Wimbledon. Messrs. EBBETTS & CORB, Architects, Savoy House, 115 Strand, W.C., and Colchester. HARMER (accepted) . . . . .£70 0 0

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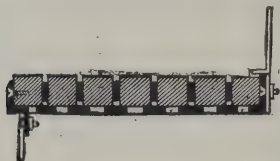
# LINDSAY'S

## IMPROVED PATENT REVERSIBLE TREADS & LANDINGS

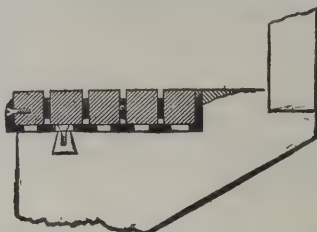
### FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

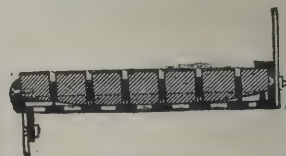
No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## THE ADMIRALTY AND WAR OFFICES COMPETITION.



OW that the conditions of the Government competition of designs for the intended building in Whitehall are fairly before the architectural profession and the interested public, and, we may suppose, accepted for good or ill by all concerned, it may be interesting to consider, amongst other questions, what effect the competition may

probably have on the professional world. We do not propose to enter once more upon a discussion of the abstract principles of such a contest, nor to speculate upon the character of the designs which will be submitted; but one thing well worth contemplating is the circumstance, as we take it, that the present contest will be chiefly a struggle of nameless men for a name.

All great competitions, it is now pretty well understood, are accomplished at a great expense to the competitors. The present case is as fair an illustration of this as could be found. The Government require to build certain Public Offices, and the first impulse of those in authority has probably been to place the matter in the hands of the architectural staff of Her Majesty's Office of Works. But instead of this simple course of proceeding being adopted, a competition has been instituted, we shall say for two reasons. In the first place there is no doubt a feeling entertained in some quarters, or at least a hope, that a better plan may be procured from outsiders of more ambitious pretensions. Secondly, and more unquestionably, there is an earnest demand on the part of such outsiders—whose name at the present moment is legion—for permission to submit designs at their own risk, everyone in anticipation of being possibly enabled to establish for himself, on the ground of either chance merit or skill, a claim, if not to take the prize of employment, at all events to rank as a highly meritorious architect at the command of the public. A large number of competitors will thus enter the lists, of whom each one will have to spend money and money's worth perhaps much more freely than in previous cases has been ever done. The aggregate of this expenditure will therefore be large; and thus, as we have said, the benefits of the contest, whatever they may be, will be secured at a great cost to the competing architects.

It is satisfactory in a certain sense to be able to reflect that in this competition the advantage may be considered to attach to the competitors rather than to the promoters; that is to say, the expectation of the Government that a more serviceable design will be obtained than the Office of Works could produce is, as matter of fact, probably very small, whereas the hope of securing fame of a high order which animates a very considerable number of able and deserving professional aspirants is great. But those who are to look on must be prepared for a long and tedious struggle. Judging by universal analogy, this is what will happen. A hundred architects—perhaps many more—will first put themselves, at their own cost, through the whole process of devising as many elaborate solutions for an enormously extensive and intricate problem of expert design. Of these all but a handful will be at once choked off. The selected few will then virtually devise everything anew in still greater elaboration. Then one of them may be pronounced the winner without reservation—which is, however, very unlikely; or two may be bracketed as equal; or a still wider difference of opinion upon the merits may, more probably, be developed. In any case a contest of claims will inevitably arise which may speedily become a personal wrangle. Popular opinion (if it can be excluded from interfering in the preliminary encounter) now comes in like a flood; the designs are exhibited and commented upon, and all the *pros* and *cons* of merit and of authorship are vigorously debated. Parliament is also appealed to, and we all know what that means: Parliament, of irresponsible and omnipotent authority; Parliament, of inscrutable

and inaccessible mind. Everything must now depend upon what, to the trembling candidate, is as good as accident. Years have elapsed since the beginning of the adventure; years still have to elapse. Ministries come in and go out; great legislative problems elbow such small proposals as new buildings promptly out of their way; in every respect there is nothing, as Lord BEACONSFIELD put it, so certain to happen as the unforeseen. At last—no one knows when, and no one knows how—something, and no one knows what, is suddenly settled, and, in all probability by a fluke, somebody finds himself unexpectedly landed, if in the possession of honour and profit combined so much the better, but if in the enjoyment of profit only, and perhaps questionable profit, so it must be. Then, bit by bit, the building is erected year by year, and, probably, when some ten or twenty years have passed from our present year of grace 1883, the good people of the Admiralty and the War Office are at last ensconced in their rooms, at once to begin a course of grumbling destined never to cease. Of the architect's 25,000*l.*, meanwhile, although it sounds so large, one-half has been expended in office charges, and the other half he has had to live upon; and, what is the oddest part of the whole affair, it is by no means certain that this particular architect was even one of the competitors!

Nevertheless it is not to be disputed that such a competition is a great opportunity for those architects who are conscious of possessing ability and impatient of the slow pace of a private career; and no doubt this consideration will be found, as we have said, to induce a large number of skilful men to encounter with hope the series of uncertainties we have indicated. Who, then, are to be the competitors? It is pointed out, in a characteristic article which our contemporary the *Saturday Review* has published on the subject, that of those who engaged in the Government competitions for the great building at Downing Street in 1857, and the Law Courts and National Gallery since, almost all the more conspicuous have passed away—SCOTT, STREET, BURGESS, EDWARD BARRY, DIGBY WYATT, and several others;\* from which the conclusion seems to be drawn that only a lower class of architects must be expected to come forward now. But this, we beg to submit, is far from being a correct view of the case. It must be borne in mind that in 1857, and even at the later date, such men as those above named were not the distinguished personages they subsequently became. There were dignified seniors in those times, just as there are now; and they left the competition to the juniors, as will be done now. We do not expect to find the very leading men of the profession taking the trouble to compete in the present case; with them there is not much to gain, whether in purse or in pride, and there is a good deal to lose, if only in repute. But, for every second-rate architect who came to the front in 1857, we may safely say there are a good half dozen of much superior men now by whom this opportunity for asserting their claims to distinction may fairly be accepted. What is more, it is probable that these competitors will come boldly from all parts of the country, and not by any means from London alone, as has on former occasions been so much the rule.

But, looking at the competition as we are now doing, as a contest for celebrity, chiefly, on the part of a large body of impatient artists who have not yet made their mark, the question is—Will it be allowed to answer their purpose? The recent Glasgow competition seems to have answered no one's purpose, except that the successful competitor has received employment. The designs not having been exhibited (except in a partial and parochial way under the express discouragement of authority), the unsuccessful men have been put in the mere position of tradespeople whose tenders were declined. This is one of the weak points of the "preliminary sketch" system. In the case now in hand it is to be so far insisted upon that, for the sake of fair play amongst the selected ten, the rejected ninety are virtually forbidden to exhibit their productions. In other words, as the exhibition of the rejected sketches without the accepted ones after the preliminary selection would be of no service to anyone, so also the exhibition of all together after the final decision would be almost quite as useless, except to the authors of the selected ten. How far, then, will the advertisement of the merits of the ten satisfy the purpose with which a hundred or more will enter at such great expense into the competition? We are in hopes

\* The name of Mr. Garling, the first prizeman for the War Office in 1857, is included with the rest; but this is happily a mistake, as Mr. Garling is still not only a living man, but a man in middle life.



that, with a little generous consideration on the part of the representatives of the Government, more may be done in this way than appears probable. Indeed, we are inclined to think there may be two opinions upon the primary question whether or not to exhibit without reserve the whole of the sketches before even the selection of the ten is made. On the one hand there is the risk of plagiarism, no doubt; but on the other there are the much larger interests that are bound up in publicity of administration, and all the personal benefits of advertisement besides. Why should not a little ingenuity be brought to bear upon these considerations amongst others? If the principle should be strictly acted upon by which a sort of universal acquiescence in the ultimate decision is obtained by force of arbitrary authority—as was done, some allege, in the Glasgow case, and as it is easy to do through the artifices of official reticence and red tape—then the opportunity of acquiring credit in return for the outlay on rejected designs will no doubt be almost entirely lost; and the competitors as a body, if they could so act, would do well to take this into account at once. Commercially the Government are to pay 5,400*l.* for some ninety-nine rejected designs, which will cost their authors probably not less than three times as much money; and it will be indeed a pity if nothing beyond rejection, pure and simple, is to be had in return for the sacrifice.

### ENGLISH SCHOOLS.

THE endeavours which have been made to bring education within the reach of the humblest classes are creditable to the people of this country. Twelve years ago the schools in England and Wales could accommodate no more than 8·75 per cent. of the population; in 1882 it was found that there were schools for 17·24 per cent. In other words, schools for about two millions of children have been erected since the passing of the Education Act. The cost of the effort to provide school places may be inferred from the fact that the Education Department has sanctioned loans amounting to 14,721,650*l.* Already about two millions of money have been paid to the Public Works Loan Board for interest.

It is assumed that school seats should be provided for one-sixth of the estimated population, which in 1882 might be calculated as amounting to 4,387,562. The actual supply is in excess, as the returns show that provision has been made for 4,538,320 children. But the supply is not distributed evenly over the country; and while in some reports the erection of additional schools is urged upon the authorities, in others it is suggested that there are more seats than scholars. In the Blackburn district the number of school places is nearly equal to one in four of the population; in the Boston district there are 27,000 seats for 17,000 children. But there are towns which show a great deficiency of accommodation. Folkestone, for example, is said to be worse off for schools than almost any town of its size and importance in England.

The blue-book on Education is now one of the largest that is issued, but the restriction of the inspectors' reports to a limited number of pages has had the effect of excluding those remarks upon the arrangement of the school buildings which were a feature in former reports. This is to be regretted, for occasionally an useful suggestion was to be derived from the official criticism. In the Blackburn district two schools are selected by the inspector as models of what schools should be, viz. the Hurst Green Roman Catholic School and Thornley School. The latter was built by Lord DERBY, and is said to be the best bit of school architecture in the district. The inspector for the Salford district writes:—

There has been a great improvement going on in the buildings and premises of schools, but it must be borne in mind that at the inspection of returns in 1871 the standard set up in such matters was not a high one, and that, where the defects are radical, the inspection is practically powerless to effect improvement. In these cases it would much strengthen our hands if your lordships would, upon the inspector's report, require plans to be laid before your own architect, and fix a limit of time beyond which grants must not be looked for. At present, too, managers alter or enlarge schools, just as they fancy. It would be no hardship if all alterations of premises had to be submitted, if small, to the inspector of the district, and if large to your lordships' architect. Perhaps the most general fault of the schools in this district is their want of light. Our skies are not naturally bright and sunny, and art has come in with volumes of smoke to aggravate the defects of nature. But in spite of this the windows, which in

most schools are far too small, have been glazed with thick semi-opaque glass which, especially when dirty, reduces the light still further. Of course I see that it breaks less easily and saves blinds, but, while it must largely increase the gas bill, the consequent pollution of the air, and the prison-like depressing gloom which it produces in the school-rooms, must tell heavily upon teachers and children. In many cases I have got managers to replace broken panes with common clear glass, but this is at best a slow process.

In the old days, mixed schools—that is, schools in which boys and girls were taught together—were common enough in this country. It is a school of this kind that is depicted in MULREADY's picture *The Last In*, and, looking at the charming scene there represented, it is not surprising that there should be managers who are in favour of reviving the old-fashioned system. There are rural districts which seem hardly able to support a boys' school and a girls' school, and in such cases mixed schools become almost inevitable from financial causes; but the question to be considered is, Are they adapted to places where there is a large number of children? One of the principal arguments urged by the advocates of mixed schools is that the presence of girls has a beneficial influence, making boys more gentle, considerate, and polite. But, unfortunately, everyday experience does not support this theory; and in those schools, as afterwards in life, the weaker sex is made to be the "bearer of the burthen." One inspector says that in mixed schools he constantly sees "the girls waiting upon the boys, instead of the boys upon the girls, in the moving of desks and benches, in the collecting of books and slates, and in other work connected with the daily routine of school-life, which ought to be done by boys." Managers must be as well aware as are the inspectors of what occurs in those schools, and it is therefore absurd to support them as if they were schools of deportment. It would be more honest to say that the schools find favour because it is cheaper to build and to control one school than two. In some places where there are separate schools for boys and girls, the playground is common, with what results may be seen from the report of the inspector for part of the Middlesex and Surrey district. He says:—

Circumstances have led me of late to see more clearly than ever the momentous part played by the playground in the formation of character. It is there, between school-times, that the influence of children upon children—the effects of which can scarcely be over-estimated—is brought into play. In the school they are fed, it is in the playground that they ruminate; that is the sowing, this the growing time. And separate playgrounds for boys and for girls is a point of as great moment, and as strictly insisted on by your lordships, as a playground at all. At Mitcham boys and girls have been used, from time immemorial, to play together on the village green. How injurious such an arrangement would be to the morals and manners, of the girls especially, may be easily imagined. Not to mention the obvious objections to it, boys are apt in their play hours to treat girls as if they were other boys. They hit them. They kick them. They knock off their hats and tear their dresses. The feminine character of their amusements is an annoyance to them. Their habit of joining hands and swaying about contentedly in a ring for an hour at a time provokes them to fury. The separation of the sexes in their play time is a measure so obviously to be recommended, that it is strange to find objections so often taken to it, and these objections invariably proceed from members of the male sex. In one place, where I had twice in the annual report urged the allotment of a separate playground to the girls, without success, I inquired of the chairman of the managers what his motive might be for desiring to keep the boys and girls together, and his answer, from the point of view of the interests of the stronger sex, was conclusive: "It refines the boys."

Without this belief in the refining influence of women, dame schools would not be supported to the extent they still are throughout the country. At one time the schoolmasters in the army were sergeants who were incapacitated for ordinary duties, and the mistresses of the majority of dame schools might be placed in the same category, for they have adopted the teacher's profession because it is supposed to require little vital force, and no preliminary training:—

In one of the most important centres of the fishing population on the south coast of Devon I was informed a few years ago (says Mr. Burrows) that according to popular custom of long standing the widows of the men lost at sea usually opened small schools, and that this had long been regarded as their natural means of subsistence. It mattered not that the worthy dame was in such cases illiterate; her domestic misfortune was considered to be a perfectly sufficient qualification for her new duties, and her neighbours held with Dogberry that "to write and read comes by nature."



It has been calculated that about 780,000 children are "taught" in dame schools, which in 99 out of every 100 cases are grossly inefficient. The schools correspond with the teaching. In one Kentish private school the inspector says the ceiling was so low that, in order to stand upright, he had to place his head between the beams; in another the stench from a neighbouring slaughter-house was overpowering; in a third there were only 360 cubic feet of space per child, instead of 800. Why schools of the kind should be patronised is difficult to understand, and the conclusion arrived at by one of the inspectors is "that there must still be a large number of our fellow-countrymen who like to show their independence by doing things in their own way, and prefer to send their children where they like rather than to a school selected for them by others." Another inspector recommends, as the only means to remedy the evil, that all the private elementary schools in the kingdom of the class we are considering should be assumed to be inefficient, and be dealt with accordingly. In some exceptional cases the teacher might not be useless, but it would be difficult to find a dame school which was not unfitted for the reception of children. If these worthless schools were abolished, we should hear less about the superabundance of new Board schools.

## AN IRONMASTER'S HALL, YORKSHIRE.

[BY A CORRESPONDENT.]

LAST week, in connection with the proceedings of the Iron and Steel Institute in Cleveland, we illustrated Marton Hall, Middlesbrough, the residence of Mr. CARL F. H. BOLCKOW, J.P., D.L. We propose now to notice the principal art treasures which it contains.

Entering the spacious hall, the first object that presents itself is an old Roman mosaic, forming a portion of the floor, that was brought from Alton Towers. Nearly one-half has been restored, but the remainder is just as it existed so many hundred years ago. Let into the walls are four white marble medallions in *alto relievo*, representing the *Rape of Proserpine*, also from Alton Towers. In the hall are eight columns, and as many pilasters of *rouge impériale*, which was very difficult to match when the alterations were made. Over a handsome chimneypiece in Sienna marble, with sculptured white marble panel, is a minute modern mosaic, by RINALDO, of the ruins of Pœstum. There are six white marble busts, by WYATT, of the following engineers: *George and Robert Stephenson, John Fowler, Rendel, Hawkshaw, and Nicholas Wood*. Busts of the *Queen* and late *Prince Consort*, by MAROCHETTI, are replicas of those in the possession of HER MAJESTY. Near *The Wounded Fawn*, sculptured in white marble by TADOLINI, are two large vases elaborately carved, and having triangular pedestals. The hall also contains copies of well-known statues, two porphyry vases, a very old inlaid table entirely composed of various Italian marbles, and two old Venetian chairs of ebony inlaid with ivory. An imposing staircase in two flights leads to a gallery running round the hall, and leading to the various apartments. The steps are of veined white marble, with balusters of grey marble, while the pedestals at the base are of serpentine. On the upper floor are eight columns of Sienna marble, with arches of white-veined marble, the spandrels being filled in with alabaster, forming an alcove. LANDSEER'S *Braemar* is placed on the landing of the staircase. It was too large to be removed so as to form part of the representative exhibition of the artist's works that was organised shortly after his death, and it has never been seen in public. On one side of it is a bust, by STEVENSON, of the late *Mr. Bolckow*; and on the other a bust of the *Duke of Connaught*, which was finished by the Princess LOUISE, and bears the words, "Princess LOUISE, sculpt.".

Leading from the gallery surrounding the hall is the Prince's Boudoir, so called from its having been occupied by Prince ARTHUR on the occasion of his opening the Albert Park, which was presented to Middlesbrough by the late Mr. BOLCKOW in 1868. This room is entirely hung with water-colours of great value. The principal work is *The Horse Fair*, by ROSA BONHEUR, who, having already painted a replica of her well-known picture, could not paint a third in oil. This drawing, however, signed and dated 1867, is a more pleasant-looking work of art than the original painting. Another

water-colour by ROSA BONHEUR, of a *paysage* with water and sheep, is signed but not dated. *Portsmouth and Tynemouth*, by TURNER, are in his early and best style; they are really finished drawings, in which nothing is left to the imagination, as in his later and more ambitious works. *Waiting*, by MEISSONNIER, also a water-colour, represents a trooper doing "antechamber," as the French call it, in anticipation of an audience. In this room are also *Tivoli*, by DAVID COX; *An English Landscape*, by THOMAS CRESWICK; *On the Shores of the Adriatic*, by BARRATT; and drawings by STANFIELD and COPLEY FIELDING.

A boudoir is also hung with water-colours, six of them being by TURNER—viz., *Eridge Castle*, with a beautiful effect of the sun's rays; *St. Agatha's Abbey*, with a fine reflection in the water; *Sidmouth*; *Wensleydale*; *Cassibury Park*; and *Llangollen*, in the latter of which are seen indications of the artist's later and misty manner. Here is also the original drawing by SAMUEL PROUT of *The College at Heidelberg*, with its fine architectural details, and *Beauvais Cathedral*. There is an effective sketch of *Bringing a Lugger on Shore*, by W. BEVERLEY, the scene-painter. *The Raising of Lazarus*, by CATTERMOLE, is highly finished and very striking. There are also *Too Hot*, by HUNT; *An English Landscape*, by JAMES LINNELL; *Deer Stalking*, by COX; and *The Chamois Hunter*, by CARL HAAG. Owing to the fact that Captain COOK was born at Marton, great pains were taken to secure two medallion portraits of him by WEDGEWOOD, which are placed in this room. There are also some medallions, and a tazza in Limoges enamel, the arrangement of colours being highly artistic; a vase in *cloissonné* enamel, and a salver of copper painted in oil. Nearly all the furniture in this room is ancient, being actually of the Louis XV. period, with its original *repoussé* work; and the upholstery of the chairs consists of Amiens silk.

On the walls of the gallery, beginning on the same side as the two boudoirs, are three oil paintings of Venice, by E. W. COOKE; they afford views of Santa Maria della Salute, St. Mark, and the Piazzetta. A striking picture is *The Abandoned*, by SCHREYER, which gained the gold medal at the Paris Salon in 1867. It represents an ammunition waggon, to which two grey horses are harnessed; but one has been shot in the battle, and the other, full of terror, is fixed to the spot by the harness and his dead comrade. There are also *Old England*, by CRESWICK; *A Highland Lot for Sale*, by R. ANSDALL; *The Broken Violin*, an Italian scene, by FEYAN; and *A Happy Family*, by SONDERLAND.

In the alcove communicating with the other side of the gallery is a picture of additional interest since the late earthquake, viz. *The Shipwreck*, by WEBB, introducing the Castle of Ischia. *Among the Fells*, a scene in East Cumberland, and *A Summer Sunny Afternoon*, are characteristic paintings by SIDNEY COOPER. *Excelsior*, by SANT, illustrates "Hark! 'tis the lark, the herald of the morn." CHARLTON has painted the portraits of three favourite dogs of the late Mr. BOLCKOW; and *Waiting for the Herring Boats*, by JOSEF ISRAELS, introduces some gaily dressed Scotch fishwives. *The Subsiding of the Nile*, by GOODALL, is a magnificent picture. There is here a splendid example in oil of ROSA BONHEUR—*Deer in the Forest of Fontainebleau*. JOHN PHILLIPS is represented by *A Castagnette Player of Seville*. There is fine expression in *The Reprimand*, by E. FRÈRE, whose *Wood-gatherers*, a small but effective picture, is also included in the collection. *Forbidden Fruit*, by SCHLOESSER, is a humorous German scene in which some schoolboys are caught smoking by the master. There is also a little gem by P. F. POOLE, *The Sisters*, representing two fisher-girls, one dark and the other fair, performing their toilet on the sea beach. A cabinet containing valuable specimens of Dresden china, formerly belonging to one of the doges of Venice, faces a table covered with china in WEDGEWOOD'S first style.

Descending again to the ground floor, we first enter the morning-room, in which there are two columns in *rouge royale* marble, and two chimneypieces in a very rich, deep red marble. Over one of them is a large enamel by LEPEC, a French artist of Spanish origin, showing a life-size bust of *Clemence Isaura*, the early patroness of French art, surrounded by a shield with elaborate Arabesque ornament, and bearing the motto "Poesim pictura celebrat." This lady, of high birth and celebrated for her beauty, offered floral prizes, composed of precious stones, for excellence in the arts. She is represented life-size and in profile, the intellectual beauty of the face being set off to great advantage by the artistic arrange-



ment of the costume and the harmonious treatment of the borders.

Opposite this rare work is a copy in white marble of CANOVA's statuette of *Hebe*, flanked by a pair of black Wedgwood vases. The room contains another gem, *The Stirrup Cup*, by MEISSONNIER, placed above *A Country Fête*, by WATTEAU, which is authenticated. There is an example of W. MÜLLER—one of his best—in *Ancient Tombs and Dwellings in the Rocks, Lycia*. There are also STANFIELD's *Tronsberg in the Tyrol*, JOHN PHILLIP's *Scotch Lassies*, and FAED's *Homeless*. *The Interior of a Spanish Hostelry* is by RUIPEREZ, a Spanish painter who died young about ten years ago, but who, it is thought, would have become a second MEISSONNIER had he lived. In *The Eastern Woman*, by GÉROME, there is a marvellous effect of a green veil. *The North-West Passage*, by MILLAIS, contains a portrait of the late JOHN TRELAWNEY, illustrating the sentiment, "It might be done, and England should do it." A good example of the English school is *Robbing the Orchard*, by G. MORELAND; and *Going to Market*, by L. PERRAULT, represents a Norman peasant girl in white *bonnet* and *sabots*, with a white fowl. *The Eve of Saint Agnes* is a characteristic work by DANIEL MACLISE. *News of our Wedding*, by TISSOT; *The Déjeuner*, by C. MOREAU, and small works by PHILLIP and DÜVERGER, here find a place. This room also contains a cabinet full of Wedgwood pottery, forming the most complete collection of Wedgwood ware that exists.

Over the side-board in the dining-room is an immense glass, with carved oak frame by ROGERS, representing, in high relief, game, fish, fruit, and musical instruments. The side-board itself was successfully made to match by Messrs. GILLOW. There is a good example of the earlier period of MILLAIS in *The Love of James I. of Scotland*. *La Falaise*, by SCHLESINGER, represents a fisher-girl; and *Going to Market*, by MORELAND, introduces a white horse. A white horse is also a prominent feature in the well-known picture by J. F. HERRING, that has frequently been engraved, the same artist being again represented by *Labour and Rest*. *Pepys's Introduction to Nell Gwynne*, by A. L. EGG, is an interesting example of character painting. *The Intruding Puppies*, with monkey, by LANDSEER, is also a wonderful bit of character. The countenances of master and pupil in *Both Puzzled*, by ERSKINE NICOL, form a study, as they are cudgelling their brains on the proposition, "If once naught be naught, twice naught must be something, for it's twice what once naught is." A fitting companion is *The Hedge School*. *The Result of Intemperance*, by WEBSTER, is a humorous picture of a village episode on Sunday morning. A drunkard, in the stocks, is being tickled by an urchin with a straw, while the majestic beadle turns a deaf ear to the supplications for his release by his wife with several children round her. The envy of one of them is roused by a boy taking home a dish of baked meat, while the mother of the latter is coming after him with the stick for loitering. *Grand-mother*, also by WEBSTER, is supposed to be a portrait of the artist's own mother. The old lady is peeling a potato, and the details are worthy of the Dutch school. He is again represented by *The Dame's School*. There are two examples of THOMAS FAED, *The Silken Gown* and *Baith Faithier and Mither*; while JOHN FAED is represented by a *Pedlar Reading a Ballad to an Old Lady and Two Scotch Lassies*. There is a valuable painting by WILLIAM COLLINS, *The Skittle-Players*, perpetuating one of those scenes in village life that do not now often recur. *Launce and his Dog* is an original by CALLCOTT. *After the Battle*, by CALDERON, represents some English soldiers, after the war in La Vendée, finding a little boy seated on the side of an overturned cradle. *Rembrandt Entering the Anatomical Museum*, by C. BISSCHOP, the grand Flemish painter, is very strong in light and shade; while *Le Cuisinier Flamand*, by TENIERS, is noticed in SCHMIDT's "Catalogue Raisonné." *Kate Nickleby*, by FRITH, was purchased from the collection of the late CHARLES DICKENS. In *Hagar and Ishmael*, by MERLE, the countenance of the bondwoman is intensely expressive of both grief and indignation. *Jacob's Servant and Rebecca*, by GOODALL, came direct from the Academy. *The Interior of a Stable*, by VERBOECKHOVEN, is one of the hundreds of such scraps that are scattered over the whole world. *Cattle and Sheep* are in SIDNEY COOPER's early and best period. In this room are also *Shepherd, Sheep, and Dog*, by ANSDALL; *On the Scheldt*, and *The Steeple Rock*, Kynance Cove, Lizard, Cornwall, by COOK, and the *Ecole Communale des Filles*, by E. FRÈRE.

In the drawing-room there are a pair of Egyptian marble

columns, with beautifully-worked capitals. The two chimney-pieces are of white marble, delicately sculptured. *The Syrian Slave*, by TADOLINI, is a statue finely executed from a pure bit of white marble. *The Return from Pasture* is a Hungarian scene with cattle, cleverly painted by ROSA BONHEUR. There is one example, *Art and Liberty*, of GALLAIT, the Belgian painter, whose fiftieth anniversary of winning his first medal has lately been celebrated, with great enthusiasm, at his native town of Tournai. *Prayer in the East* is a masterly painting by GÉROME. There is a replica of FRITH's picture, in the SHEEPSHANKS collection, of *Honeywood introducing the Bailiffs as his Friends*. *Rachel* is a highly-admired work by GOODALL. *The Bay of Naples* is a well-known painting by W. MÜLLER. There are two examples in this room of DAVID COX, *Driving Home the Flock*, which is one of his best, and *Counting the Flock*, a lovely picture. *Old London Bridge* is in TURNER's best style; *Noonday Rest* is by J. LINNELL, sen., the best painter in this style, who died last year. STANFIELD is represented by a very fine specimen, a sea-piece, with marvellous waves. In *The Water-Cart*, by C. TROYON, there is a delightful chiaroscuro effect, nature being represented in by no means her brightest mood; while *The Song of the Troubadour*, by P. F. POOLE, is attractive from the reflection in the water. *The Meeting of the Avon and Severn* is a minute painting of a scene at Penpole Point, near Bristol, by P. NASMYTH. *A Jewish School at Cairo* is one of those representations of Eastern life painted by HENRIETTE BROWN (Madame DE SEAU), who accompanied her husband into Syria when he was appointed Minister Plenipotentiary. The list of pictures in this room is completed by H. MERLE's *Holy Family*, BOUGUEREAU's *Day Dreams*, and JOHN PHILLIP's *Spanish Ladies*. Mention must also be made of a very fine "cabaret," or tea and coffee-service, in china, of the Marcolini period, the salver beautifully painted with a copy of GUIDO RENT's *Venus and Cupid*. An ancient vase of Vienna china, with cobalt ground and minute Pompeian decoration, bears a representation of *The Judgment of Paris*. A pair of vases, also in Vienna china, possess not only an artistic but also a historical value, having been presented by FRANCIS I. of Austria to a well-known diplomatist on the occasion of the peace of Vienna being signed. The drawing-room is rich in china, there being also a pair of Oriental, a pair of Worcester, a pair of old Sèvres, and a pair of Dresden vases. A rare curiosity is an old timepiece in Louis XV. style, bearing the maker's name, "BAILLON, à Paris," in white Sèvres china, with ormolu mountings. The hand, wrought in diamonds, is fixed, while the horizontal dial revolves. An old German carving in ivory, partly relieved with black, represents Father Time cutting the thread of life; and an old rock crystal cross was obtained from a church at Saragossa.

The drawing-room communicates with a conservatory, adorned with a beautiful fountain and rare tropical plants, and the conservatory with the fernery, tastefully laid out with rock-work. On the occasion of the *conversazione* given to the members of the Iron and Steel Institute, both the conservatory and the fernery were illuminated with twenty-two SWAN incandescent electric lamps, supplied by FAURE-VOLKMAN storage batteries, sent down charged from London by passenger train the previous day. The work of laying the wires was begun and completed the same day by Mr. T. SMITH, engineer to the Hammond Electric Light Company; and this formed one of the chief features of the evening. It may be mentioned that there are private gas-works attached to Marton Hall.

The library contains many valuable works, including a volume with some of Sir WALTER SCOTT's manuscripts, a Latin Bible, some illuminated missals dating from 1400, as well as copies of FROISSART's "Chronicles," and of GOULD's "Birds of Europe." In this room is a portrait of Captain Cook, while his log-book is carefully preserved, in company with a copy of his work on the circumnavigation of the globe. The great navigator was born in a cottage which was unfortunately demolished when Major RUDD erected his mansion in 1786. The present hall stands on the same site; and a pump which belonged to the cottage is still preserved in the garden, while a granite fountain marks the site of Captain Cook's birthplace. The register of Marton parish church contains the entry of his baptism, as follows: "Nov. 3, 1728, JAMES, ye son of JAMES COOK, day labourer." A black marble tablet in the sacred edifice bears the inscription, "To the Memory of Captain JAMES COOK, navigator, who was born in this parish October 27, 1728, this tablet was erected by the parishioners of



Marton, A.D. 1812." Moreover, an obelisk in his honour crowns the summit of Eastby Bank in the neighbourhood, while a memorial school has also been erected in the village.

### PARIS NOTES.

A NEW regulation of the Paris Municipal Committee of Public Inscriptions will necessitate a considerable increase in the size of the sign-plates throughout the old quarters of the city. The committee desire to promote among the Parisians an interest in historic topography by inscribing on the sign-boards some details which will indicate the main features and arrangement of old Paris. A commencement will be made by marking the positions of the three boundary walls that have surrounded the city at different epochs, the earliest of which extended from the Butte Saint-Gervais to the present site of the Pont-Neuf; the second from the Ave-Maria Market to the Institute; and the latest from the Tour de l'Arsenal to where the Pavillon Lesdiguières now stands. Students of archæology will be grateful when all the proposed inscriptions have been set up, and the example might be imitated in other cities with advantage.

An important work of restoration is about to be undertaken in connection with the church of Val-de-Grâce, one of the most remarkable buildings in Paris. Fifteen years ago the dome of this edifice—which is, after those of the Panthéon and the Invalides, the highest in Paris—received a new roof, the main entrance being restored at the same time. Unfortunately the great frescoes on the interior of the dome were left untouched, and are now found to be in such a condition that the greatest care and skill will be requisite for their restoration. The Direction des Beaux-Arts has entrusted several eminent artists with the execution of the work, the cost of which is estimated at upwards of 40,000*l.* These frescoes were painted by Mignard, and represent *The Reward of the Blessed*. The Val-de-Grâce was built by Anne of Austria for a Benedictine convent, from the plans of François Mansard. Court intrigues prevented the celebrated architect from superintending the execution of his own designs, which were carried out by Le Muet and Gabriel le Duc, the work being commenced in 1645, and finished twenty years later. Since the Revolution the main building has been used as a military hospital, and contains no less than 1,500 beds; the church, which was secularised during the Reign of Terror, reverted to its original purpose in 1826.

The above-ground portions of the Tuileries Palace are now entirely demolished, and, after the ground has been cleared, the basements and cellars will be attacked. Considerable curiosity exists as to whether the contractors for the demolition will be lucky enough to find in this part of the old building any of the treasures alleged by popular rumour to have been concealed therein at various periods.

The Paris Municipal Council lately voted the large sum of 1,200,000 frs. for the purchase of the ground in the Rue Monge under which lie the remains of the Arènes de Lutèce. It has already been decided to turn this ground into an open space similar to the Square Cluny, and for this purpose a further amount of 300,000 frs. will be required. At the request of several members of the Arènes Preservation Committee, M. Jules Ferry has decided to recommend the Chambers to vote a contribution of 100,000 frs. in aid of this project.

One of the most out-of-the-way corners of Paris—the Place de la Salpêtrière—is about to receive a sculptural group thoroughly in keeping with the genius of the place, and erected in honour of the famous Dr. Pinel, the great lunacy doctor. The monument has been executed by M. Durand, at the joint expense of the Government and the Municipal Council. It consists of two figures: Pinel, holding in his right hand a mass of broken fetters, stands with a female crouching at his feet, as if still chained down, but looking up at her deliverer with an expression of gratitude and awakening intelligence. The physician is represented in the dress of the Directory, and the group is considered a very fine one, the supposed expression of the faces having been portrayed with great success.

There has lately been discovered amongst some old papers at the Louvre a list of sums expended by the Superintendent of Royal Buildings from 1699 to 1704. Among other entries, there is one of 32,000 livres (about 1,300*l.*) for the two blocks of white marble

out of which Guillaume Coustón sculptured the *Chevaux de Marly*, now erected at the entrance to the Champs Elysées. These groups were the last work of the great artist, who died at Paris in 1746. The marble was brought from Carrara, and as each block contained 400 cubic feet (French, 13 inches), it is seen that Carrara marble was, even at that time, worth no less than 40 frs. per cubic foot.

M. Jules Dalou's bas-relief of *The Republic*, which gained the Prix d'Honneur in this year's Salon, and has been purchased by the City of Paris, is placed for the present in one of the rooms of the new Hôtel de Ville. It has not yet been decided whether it shall be executed in stone or marble. Near it are two of the four enormous paintings that were ordered at the commencement of Louis Philippe's reign for the decoration of the Throne Room: *Les Vainqueurs de la Bastille*, by Paul Delaroche; and *La Prise de l'Hôtel de Ville*, by Schnetz. The third, *Bailly*, by Léon Cogniet, is in another part of the building; while the fourth—which, though ordered of Drolling, was never painted—was to have represented *General Lafayette at the Hôtel de Ville*.

At the last sitting of the Academy of Fine Arts, a paper on the Life and Works of M. Henri Lehmann, a member of the painting section of the Academy and professor at the Ecole des Beaux-Arts, was communicated by Vicomte Delaborde, the permanent secretary. It will be read during the annual public sitting to be held on the 20th inst. On that occasion the prizes of the year are solemnly distributed, the three chief laureats for this year being M. Baschet, pupil of MM. Lefebvre and Boulanger, the Prix de Rome in painting; M. Lombard, pupil of M. Cavelier, the Prix de Rome in sculpture; and M. Redon, pupil of M. André, Prix de Rome in architecture.

The annual exhibition of Incoherent Art, the first of which took place last year, will open on the 20th of this month, in the Galerie Vivienne. A great number of painters and sculptors are sending in works, amongst them being Messrs. Pille, Lepic, Haquette, L. Loir, G. and H. Cain, Geoffroy, Corcos, Cartier, H. Gray, L. Dorville, Somme, Caran d'Ache, Ferninand, Roinaud, and Willette. A very curious section of this exhibition of eccentricities will be the room which has been dubbed "Salon de l'Art rétrospectif incohérent," and will contain authentic drawings by Moreau le jeune, the Comte de Chambord, Louis Philippe, Baudelaire, Mérimée, Léopold I. of Belgium, and others of the illustrious dead.

### LORD REAY ON SCIENCE AND ART.

THE prizes gained by the students of the Science and Art Classes in Hawick were distributed by Lord Reay on Saturday last. His lordship said it was not in vain that science and art had been coupled together. There was not the slightest doubt that all their science education should have at its basis a good and sound elementary education in drawing. He could not lay enough stress on the great importance, if they were to succeed with their science education, of drawing being well taught in the primary schools, and he must say that he thoroughly agreed with the committee when they made the bursary given by the manufacturers and by the Government dependent on the obtaining of two certificates in drawing. When they spoke of these art classes they very often forgot that the object of them was not alone that they should form artists and painters, though he must say that, living in a country like theirs, where, when they left the town and walked about, nature by its beauty seemed to be claiming the artist at every turn, it was undoubtedly a very great mistake they made in not obeying the commands of nature, and in not making more of art than they had done. He might be inclined to grow eloquent on that subject, because he had just been having as his guest a man who had done more than any other man to make the public in England appreciative of art—he meant John Ruskin. He could only say that when these art classes were started, as he was sure they would, because in Hawick he knew that when they once started a thing as a rule they succeeded, and did not give it up, the works of John Ruskin would certainly be amongst those which they would read with the greatest delight. He might be allowed to add that there was a claim which John Ruskin had on their respect, and that was his intense admiration for Walter Scott. When he took Mr. Ruskin to see Laidlawstiel, where the genius of Sir Walter Scott was first developed, it was quite remarkable to see the veneration with which he looked at the spot; it was remarkable to see how John Ruskin tried to inspire himself with the whole surrounding scenery; it was remarkable to see with what youthful freshness he imbibed, as it were, the beauties of the scenery between Laidlawstiel and Traquair, and with what interest he took a sketch of the house of Traquair, after, of course, he had



seen the bears on the avenue. All he (Lord Reay) hoped was that the students who should go to these art classes would, when they had attained the age of John Ruskin, by the sense of art which they would have gathered at these schools, have secured to themselves a happy old age. He might also add that if there was anything which it was sad to see, it was when they saw two great men who disliked each other, or who seemed not to be inspired with cordial feelings of admiration for each other. There it was his delight to witness how one great man perfectly worshipped the genius of another great man. He should only mention one of the fine arts which would at once show them how the connection of science and art was established—he meant architecture. He did not believe they could have a good architect who had not scientific culture as well as artistic culture. In their dwellings it was extremely important that a sanitary principle should be perfectly observed, and that a house should be made to be perfectly suitable to their everyday wants—such as the climate and other things indicated—that the architecture should be suitable to the district where the house was to be planted. At the same time, there was not the slightest doubt that they might put art in the midst of the smallest cottage they built without adding anything to the cost of that cottage. That was why these art classes, considering the amount of building which went on in the country, had not only an element of beauty, but had in them essentially an element of great usefulness. The Government coupled science and art, and they in Scotland had got hold of the same idea by calling the body which looked after art in Scotland the Board of Manufacturers.

### THE GERMAN NATIONAL MONUMENT.

ON September 28 the national monument on the Niederwald, overlooking the Rhine, was unveiled by the Emperor of Germany. The idea of such a monument was, says a correspondent of the *Times*, mooted to Prince Bismarck by Count Eulenburg so early as the day of the signature of the Peace of Frankfurt. Warmly approved by the Chancellor, the project soon after passed into the hands of an executive committee, which converted it into a resolution that received support throughout the nation. In the spring of 1872 the artists of all Germany were invited to send in models of a monument that would best express the idea and object of its erection; but though three of the twenty-six competitors were awarded prizes of honour, the jury declined to adopt any of their sketches. A second competition had no better result; but at last, in April 1874, the jury expressed themselves thoroughly satisfied with the architectural and sculptural plan of Professor Johannes Schilling, of Dresden, who was thereupon authorised by the grand committee, under the presidency of Herr von Bennigsen, chief of the National Liberals, to proceed with its execution.

The cost of the monument, which is not expected to exceed the estimated sum of 1,100,000 marks, or 55,000*l.*, has been covered partly by public subscription and partly by Parliamentary aid. As much as 240,000 marks had been collected by 1874, but there was a falling-off in the contributions in the reactionary era ensuing on the *Gründerzeit*, or time of rash and not over-honest commercial speculation prompted by the receipt of the French milliards; and though by 1878 the above sum had increased to 665,000 marks by the accumulation of interest, the sale of photographs, and collection lists of schools and veteran societies (*Krieger-Vereine*), the Reichstag in the following year saw itself compelled to vote a subsidy of 400,000 marks in order to insure the completion of the enterprise. In 1876 the necessary ground was purchased; in September of the following year the foundation stone was laid; and now the finished monument stands flashing high and far "on free hilltop by German stream" in all its proud and noble beauty.

The tourist as he passes up or down the river cannot but be struck with the shining monument away up on the Niederwald brow, but it is only when he has toiled up to it that he can take in all its expressive character and truly beautiful proportions. A colossal statue of *Germania*, said to be an idealised copy of the artist's own daughter, clad in a flowing girdle-bound robe, her left hand resting on the hilt of a drawn but laurel-sheathed sword, and her right holding high a laurel-wreathed Imperial crown—that is what surmounts the huge statuary edifice and first fetters the eye. Beneath her mantle, which is richly embossed with historic symbolism, can be seen a coat of chain mail, over that being a steel breast-plate blazoned with the Spread-eagle, and she is standing before an Imperial or curule throne or chair. Underneath, on the pedestal, is the inscription, "In memory of the unanimous and victorious rising of the German people and of the restoration of the German Empire, 1870-71." On the one side of the pedestal are the names "Weissenburg, Wörth, Spicheren, Courcelles, Mars-la-Tour, Gravelotte, Beaumont, Sedan;" and on the other, "Strassburg, Metz, Le Bourget, Amiens, Orleans, Le Mans, St. Quentin, Paris." A succession of well-laid-out terraces and flights of steps lead up to the foot of the monument, the front basement of which presents two very large and finely-sculptured recumbent figures—the Rhine and the

Moselle—the former in the shape of a Father-Neptune-looking old man offering a cornucopia to his companion, a lovely nymph with an oar or rudder in her hand. Above that on the first socket is a magnificent relief group representing "Die Wacht am Rhein," flanked at the corners by two outstanding figures, *War* and *Peace*, each about six mètres high—the former, an allegorical character, partly Mercury, partly mediæval knight, with blastful trump in one hand and sword in the other; the latter, a mild and modest angel maiden, holding out an olive branch in one hand and the full horn of peaceful blessings in the other. Between the two is the front façade, representing the "Watch on the Rhine"—a faithfully and splendidly executed relief group. In the centre is the Emperor William on horseback against a background of the banners of the chief German cities, flanked on either side by the chief princes and generals, corps and divisional commanders, and statesmen—nearly two hundred in number—who helped by word or deed or counsel to found the Empire. The Kings of Saxony and Bavaria, the Crown Prince, Prince Frederick Charles, Bismarck, Moltke, Roon, and all the rest of the kaisers, princes, knights, and paladins are there—true to the life in breathing bronze; a rich store-house and infallible standard in every respect; an Elgin marble slab, so to speak, of the German nation. In the corner of the façade relief next the figure of *War* is a group of combatant German soldiers, while on the other side, near *Peace*, warriors are shown in their career of victory. Beneath the group are inscribed five verses of the "Wacht am Rhein"—happy and thrice-to-be-envied poet to have his verse thus immortalised in bronze!—with the refrain in larger letters in one line under the whole:—

Lieb' Vaterland, magst ruhig sein,  
Fest steht und treu die Wacht am Rhein.  
(Dear Fatherland, thou needst not fear,  
Stands firm and true thy Rhine-watch here.)

On one side of the socket which bears the above described front façade another magnificent relief group represents the departure of the soldiers for the war, and their affecting leave-taking of parents, wives, and children; while on the other side is a similar portrayal of the return home of the laurel-crowned warriors. Above the Emperor, and in front of a second socket, sits perched a huge eagle—nearly 2½ mètres high—with outstretched wings and the Imperial shield on breast, while round the socket are hung the arms of all the chief States of Germany, above them being the iron cross, with various sorts of wreaths and garlands; and surmounting all, the colossal far-flashing statue of *Germania*—powerful, victorious, and proud. From the socket to the crown the monument measures about 25 mètres. The *Germania* itself has a height of nearly 12 mètres, and weighs 700 cwt. Its little finger can be spanned by two adults only; its thumb-nail is 9 centimètres broad and 11 long. A man can creep through the hollow of the wrist, and inside the lower part of the body ten couples can conveniently dance. The sword is 8 mètres long, and weighs from 5 cwt. to 6 cwt. That the monument should have been devised and completed in all its parts within eight years is justly regarded as a brilliant proof of German industry and perseverance. The technical and architectural difficulties to be overcome were immense. For the building of the lower part of the edifice stones of immense weight—some of them all the way from the Leutoburger Wald, weighing 900 kilogrammes—had to be dragged up the Niederwald slope by teams of a dozen and eighteen horses. For the modelling of the various parts of his masterpiece, Professor Schilling, of Dresden, had to erect huge scaffoldings; and when finished they were distributed among various German foundries to be cast. The moulding of the *Germania* fell to the lot of Herr von Miller, of Munich, and when triumphantly turned out, like Schiller's "Bell," the question was how to transport it to its destination—by road or rail? The latter method being eventually chosen, the various portions of the statue were conveyed with laborious precaution as far as Rosengarten, opposite Worms, where legend fables the Nibelungen Hoard to lie embedded in the Rhine's pellucid depths, and there "the epic in bronze and stone" was confided to the river. Ringing cheers and salvos of cannon greeted the huge barge and its precious burden all down the Rhine to Rüdesheim, where it safely arrived and was gradually hauled and pushed up the Niederwald slope by strenuous and sweating teams of men and horses. But would the scaffolding bear the weight of the colossal metal fragments that had to be hoisted aloft? This was first successfully tested by the swinging up of 11,000 kilogrammes of iron rails, then the main portion of the *Germania*, weighing 8,500 kilogrammes, was carefully elevated; and within a month of their removal from Munich, all the pieces had been triumphantly raised on high and fitted together. Though attended with great difficulty and danger, the laborious enterprise was accomplished without any loss of human life, the only serious mishap that marked its progress being the overthrowing of a heavy scaffold crane by a thunderstorm.

Such is a brief sketch of the work, but brief as it is it will speak volumes for the workman who will henceforth take rank with the world's greatest masters of plastic art. Professor Johannes Schilling, of Dresden, the Florence of the North, is a Saxon by birth, and was born in 1828. After studying with Rietschel he made his *début* as a sculptor in 1851, with a beautiful group—



*Amor and Psyche*. Working then at Berlin with Drake—the artist of the Victory Column—he produced a pair of relief medallions, *Jupiter* and *Venus*, which procured him a travelling scholarship; and the result of the two years' residence in Italy which he was thus enabled to spend, were his *Wounded Achilles* and his *Centaur and Venus*. Returning to steady industry at Dresden, he turned out in rapid succession a variety of high productions; and on the death of Rietschel undertook the execution of the city of Spiers figure for the Luther monument at Worms. Tourists will remember with equal admiration his *Four Seasons* on the Brühl Terrace at Dresden, his Schiller statue at Vienna, his Maximilian statue at Trieste, and his War Memorial at Hamburg, not to mention other creations, which have now all been surpassed and crowned by his Niederwald monument—a work which will immortalise its author as it will perpetuate the memory of the events whereof it is the record in eloquent marble and breathing bronze.

### THE BALFOUR MEMORIAL CROSS.

THE Kildalton Cross—of which a cast is in the Edinburgh Antiquarian Museum—is about to be reproduced in stone, as a memorial of Lieutenant-Colonel Balfour, who died of wounds received at Tel-el-Kebir. It will be erected in Markinch Cemetery. While one recognises, says the *Scotsman*, a certain fitness in the selection of a type of monument which seems to have been associated not so much with suggestions of the Passion as with the ideas of Christian hope and triumph, the example chosen as a model has the special recommendation of being one of our finest and most interesting relics of early Celtic art. From the defaced and weather-worn condition of the original, the task of restoration was one of no little difficulty; and the manner in which it has been carried out by Mr. Sydney Mitchell, architect, shows that the taste for Celtic studies which in that gentleman's case may be considered hereditary, must have been assiduously cultivated. As may be seen from the cast above referred to, the details of the old cross are in some cases completely obliterated, in others so blurred by weathering as to leave more or less room for conjecture with regard to their original appearance. Whatever could be clearly made out has been faithfully reproduced—not, indeed, with any attempt at mere mechanical exactness, but by careful drawing and modelling of the forms, and not without occasional rectification of defective workmanship. Where, on the other hand, there were only imperfect indications to go by, Mr. Mitchell, following the method of the true restorer, has brought to bear his general knowledge of the style, and made skilful use of suggestions derived from the study of Celtic manuscripts and of other sculptured crosses. The success attained in deciphering obscurity and in seizing the general spirit of the designs has been such as to win the commendation of those best qualified to judge. So closely has the original character of the work been adhered to, that a difference of style, observable between one side of the cross and the other, has been heedfully retained. In regard to dimensions there could, of course, be no doubt; and these have, accordingly, been exactly reproduced as follows: Height of cross, 8 feet 9 inches; width across arms, 4 feet 8 inches; diameter of circle, 2 feet 4 inches; width of shaft at base, 1 foot 4½ inches; at top, 1 foot 2½ inches. With the addition of an appropriate base, the monument will stand about 12 feet high. The designing of this addition was one part of the work in which Mr. Mitchell had to fall back on his own resources. The base of the Kildalton Cross is supposed to have been lost, and, as now seen, the shaft is let into a rough mass of stone. But the Irish crosses, on which this example was apparently modelled, are all found to have bases in the form of a truncated pyramid, and this form has, therefore, been adopted for the present restoration. Measuring 2 feet 11 inches in height, the block tapers from 4 feet 8 inches at the ground to 2 feet 5 inches at top, where it carries a plinth, with sides of corresponding slope, which gives an additional height of 5 inches. On the side answering to the front of the cross, the base shows a panel intended to receive the inscription, the enclosing margin being filled in with a combination of the Celtic fret with interlaced ornament. The opposite side has the central space treated with interlaced ornament of intricate design, so devised that, as frequently occurs in old work, the interspaces take the shape of a cross, while the border is enriched with an arrangement of bird forms, worked out from suggestions found in old manuscripts. This latter ornament reappears on the front of the plinth, its rearward face repeating the Celtic fret, and the two remaining sides, both of plinth and base, being left plain. In dealing with the front of the cross, Mr. Mitchell found it expedient to replace the undecipherable reliefs of the four central panels with new figure subjects of his own designing, representing the Ascension. In the upper panel is the effigy of the ascending Saviour enclosed in a vesica; while those occupying the arms of the cross show each two adoring angels; and in the lower panel there appears the Virgin, with St. Peter and St. John, looking upward. The four panels, although separated by the ornamental work at the intersection of the cross, are thus happily combined in the representation of one subject. The remaining details on this side have been

reproduced so far as possible, the patterns of bosses and tracery, where entirely lost, being restored in accordance with the general character of the work. Similar treatment has been applied to the rearward face of the cross. The chief difficulty here met with was as to the character of four animal figures surrounding the central boss. Mr. Mitchell has made them lions, on the ground that this type was used in ancient times as a symbol of the resurrection. Altogether, it seems hardly too much to say that this restoration will approve itself as something unique among Scottish monuments, and a work well fitted to foster the taste for pure Celtic art. The cross is to be carved in hard red sandstone by Mr. Alexander Rhind, sculptor, who, it should be mentioned, has tastefully modelled the reliefs of the Ascension from Mr. Mitchell's drawings.

### OWENS COLLEGE, MANCHESTER.

THE half-yearly meeting of the Court of Governors was held on Tuesday last, when the reports of the council were presented. In their half-yearly report, presented on April 3, the council stated that Mr. Waterhouse's plans for the new natural history and geological museum and laboratories had been completed and adopted, and that the architect had been instructed to cause the quantities to be taken out, and to invite tenders for the work. Estimates were accordingly in due course invited, and on August 3 the contract was let to Messrs. Southern & Sons for the sum of 66,375*l*. The contract includes the erection of the museums and laboratories in Coupland Street and along the northern half of its frontage in Oxford Road, and of a lofty entrance tower, which will connect the museums with the library and public hall, which are destined to occupy the southern portion of the Oxford Road front. The fund being raised by the joint committee mentioned in the last report for the erection of the new museums has now reached the sum of 27,541*l*. Although the committee has been so far successful in its canvass as to justify the council in proceeding with its task, a large addition to the amount subscribed will be necessary in order to the completion of the works now undertaken. The new Medical School buildings are at length completed, and will be entered upon forthwith. Their erection was called for not only by the great and rapid growth of the school—the number of our medical students having nearly doubled since 1874, when the school was removed from Faulkner Street to the present building—but also by the necessity of providing ampler means of teaching those branches of medical science which have been so greatly developed in recent years—physiology, pathology, and *materia medica*. It is believed that the series of laboratories, museums, and lecture-rooms which the school now contains will bear no unfavourable comparison with those of any medical school in England. The erection of the new building has been executed by Messrs. Southern & Sons; the cost, inclusive of the expensive fittings of some of the rooms, will not fall short of 10,000*l*.

The Chairman offered his congratulations to the medical professors and students on the completion of the extended buildings of the medical department. He believed the accommodation afforded for that department would now compare favourably with that of any medical school in the country. The extension was the more important and welcome as the question of medical degrees was now, he hoped, very near to them. There was another matter of public interest which it was well he should name—that the council had entered into a contract for the commencement of the museum buildings. This did not mean that they had got all the money they required—they required a great deal more yet; but they had got so much that the council thought they were justified in commencing proceedings.

### THE MERSEY TUNNEL.

THE last week has been the most successful of all similar periods hitherto in the progress made under the river, no less than forty yards advance having been achieved. Of these, thirty were on the Birkenhead side with the Beaumont machine (which now seems thoroughly adapted to the precise quality of rock to be dealt with) and ten by hand on the Liverpool side. There now remain 523 yards between the two extremities of the headings. The main tunnels are, of course, being proceeded with with all possible speed, and are following up the headings rapidly. In the course of about another month they may be expected to reach the points where the main tunnel and the drainage headings meet and become one. By that time, therefore, the two ends of the main tunnel will be within 400 yards of each other. At last week's rate of progress the heading would be completed by December 31. Taking the average rate of the last seven weeks—namely, 32½ yards—it would be through before the end of January.

An Exhibition of Works of Art, which are to be exclusively Italian, is to be opened next year at Buenos Ayres.



## NOTES AND COMMENTS.

M. QUANTIN, the Paris publisher, has been enrolled among the Legion of Honour, and artists and amateurs in France will be gratified by the selection. Among the great publishing firms of Paris that of A. QUANTIN et C<sup>ie</sup>. holds a distinguished place. In art literature it would be difficult to name one which is higher. From M. QUANTIN's house in the Rue Saint-Benoit have been issued those splendid volumes containing reproductions of the works of REMBRANDT, HOLBEIN, DA VINCI, MILLET, and other artists, which are everywhere esteemed as treasures. Works on architecture, decoration, metal work, and archæology of a standard character, have been published by the firm, and from the first their names have been associated with the *Revue des Arts Décoratifs*.

THE REV. GEORGE AYLIFFE POOLE, M.A., who died lately at Winwick Rectory, gained some reputation as a writer on architecture. He was the author of "The History of Ecclesiastical Architecture in England," "The History and Architecture of Lincoln Cathedral," "Character of Church Architecture," besides other works, which, if not profound, were agreeably written. At one time clergymen were distinguished for their interest in subjects connected with architecture, but their intellects are now apparently absorbed by other things. Mr. POOLE was almost the last of the clerical amateurs who exercised so much influence on church architecture in this country.

PUBLIC improvements are as difficult to be carried out among the patriots of Dublin as in any town in England or Scotland where the pursuit of wealth is supposed to be paramount. Everyone who has visited the Irish capital knows the steep incline near the Castle which is called Cork Hill. It entails so much strain on horses that the Society for the Prevention of Cruelty to Animals for a time kept a horse to assist others in the ascent. At length the Corporation have undertaken to improve the approach. The house property that is required is not of much value, but the claims of the different owners amounted to about 100,000*l*. An arbitrator was, however, appointed, and according to his award the value of the houses is 47,000*l*. This sum is very high considering the character of the houses, but it is less than one-half the original demand.

THE success, financially, of Mr. HENRY TAYLOR'S "Old Halls of Lancashire and Cheshire" is insured, for the four hundred copies in the edition have been subscribed for within a week after the publication of the prospectus. The subscribers have depended altogether on the faith of the author and publishers. The drawings have been prepared, but not one of them has been photolithographed, and there is not a page of the letterpress ready. But Mr. TAYLOR has taken so much interest in the old halls of the Lancashire district, the character of his book might be assumed without difficulty.

THE judges have made their awards on the various objects shown at the Sanitary Exhibition in Glasgow. Messrs. DOULTON & Co. have obtained certificates of merit for their silicon tread for stairs, flush-out closets, trough closet with automatic flush tank, anti-percussion high-pressure valves, and ventilating tile stove. Three certificates have been awarded to Messrs. SHANKS & Co. for Eureka spray and plunge baths, cast-iron baths, and porcelain lavatories with movable caps. The Pennycook Patent Glazing and Engineering Company have secured a certificate for glazing. The conical ventilators and radiator ventilators exhibited by Mr. G. E. ELLISON, of Leeds, and the noiseless breast ventilators and wall-inlet ventilators of Messrs. KITE & Co. were also selected for certificates.

A REPORT has been prepared by the sub-committee appointed by the Sanitary Institute to investigate the composition and properties of non-poisonous white paints. Three varieties of the paints have been examined, and although all the paints were found to be practically free from lead, two out of the three driers supplied with them contained lead in large quantities. The manufacturer's instructions are that the driers

should be used in the proportion of about 7 or 8 per cent.; but the committee say that in practice the driers are mixed with the paints to a very much greater extent. That it is practicable to obtain driers from which lead is absent is well known, and in the experiments by the sub-committee it was found that when "the paint and driers were both free from lead, the result obtained in the trials made to ascertain the comparative merits of the different paints for decorative purposes was superior to either of the others." The report will do good in supporting against trade prejudice the manufacturers of non-poisonous paints, who are as willing to eliminate lead from the driers as from the paints.

THE national German monument has cost 59,600*l*. The principal expenses were as follows: Site, 5,650*l*; custodian's house, 990*l*; garden, 1,750*l*; pedestal, 16,750*l*; candelabra and inscriptions, 450*l*; models, 10,500*l*; statue of *Germania*, 8,787*l*; *War and Peace*, 3,000*l*; Rhine and Moselle group, 1,750*l*; escutcheons, 544*l*; eagle and wreaths, 1,347*l*; large relief, 2,565*l*; small reliefs, 1,065*l*; supervising architect, 1,550*l*; competition, 1,350*l*; and administration, 1,550*l*.

THE address which was delivered by Sir RICHARD TEMPLE before the Social Science Congress at Huddersfield on Wednesday has a passage that is worth noting. "Art-culture," said the president, "has always been advocated by this association as a fitting crown to the educational system. It is naturally much needed in the colonies, young, bustling, pre-occupied communities, where no classes have leisure. It has in the East presented problems as yet unsolved. The Asiatics have an indigenous art, which, though not scientifically directed, is yet, in genius, in perception, and in sentiment, peculiarly their own. This exceeding merit arises from the hereditary character of Eastern art, from the transmission of qualities from father to son, through many generations of artists. If we were to teach our art to the natives exclusively, they might be in danger of losing their own, which, so far as it goes, is better than that which we can teach them, and which is indeed to be reckoned among the beautiful possessions of the human race. Still we can teach them one thing, which through all the preceding ages they have never learnt, namely, drawing objects correctly, whether figures, landscape, or architecture. Such drawing tends to rectify some of their mental faults, to intensify their powers of observation, and to make them understand analytically those glories of nature which they love so well." Unfortunately the authorities have not acted on this principle. Young men who happened to possess a few certificates from the South Kensington Schools have been sent to teach art in India, and the result is to be seen in the crude colours which are found in so much modern Indian work.

THE modelling of the new candelabra at Charing Cross is by Mr. MABEY, the sculptor. In works of this kind about London effect is sometimes produced by several sprawling figures, or by ornament which appears to be "stuck on." But in the new candelabra the design is consistent throughout, and, while occupying as little space as possible, the figures are graceful and the contours are pleasing from every point of view. The modelling of the forms is masterly, and the candelabra are the best that have been erected in the metropolis.

It is reported that a well has been discovered under the flagging at the Petty Sessions Court, Carlisle, which is of historic interest. According to a legend, St. CUTHBERT, while looking into a Roman well of wonderful masonry, saw a vision, and was able to announce the defeat of the English army at Nechtansmere. Mr. R. S. FERGUSON, who is now Mayor of Carlisle, says that if the newly-discovered well is of Roman masonry, "it is likely to be the well to which St. CUTHBERT was conducted, and an opportunity should be given for examining it carefully. The notion that treasure might be found at the bottom of it is not absurd. In 1804 from a long-covered up and forgotten well in Sewell's Lane, Scotch Street, of the depth of 27 feet, were taken two most beautiful bronze Roman vases, covered with bas-relief illustrations of sacrificial rites. These were actually sold for eighteen pence as old brass, but escaped the melting-pot, and are now in the British Museum."

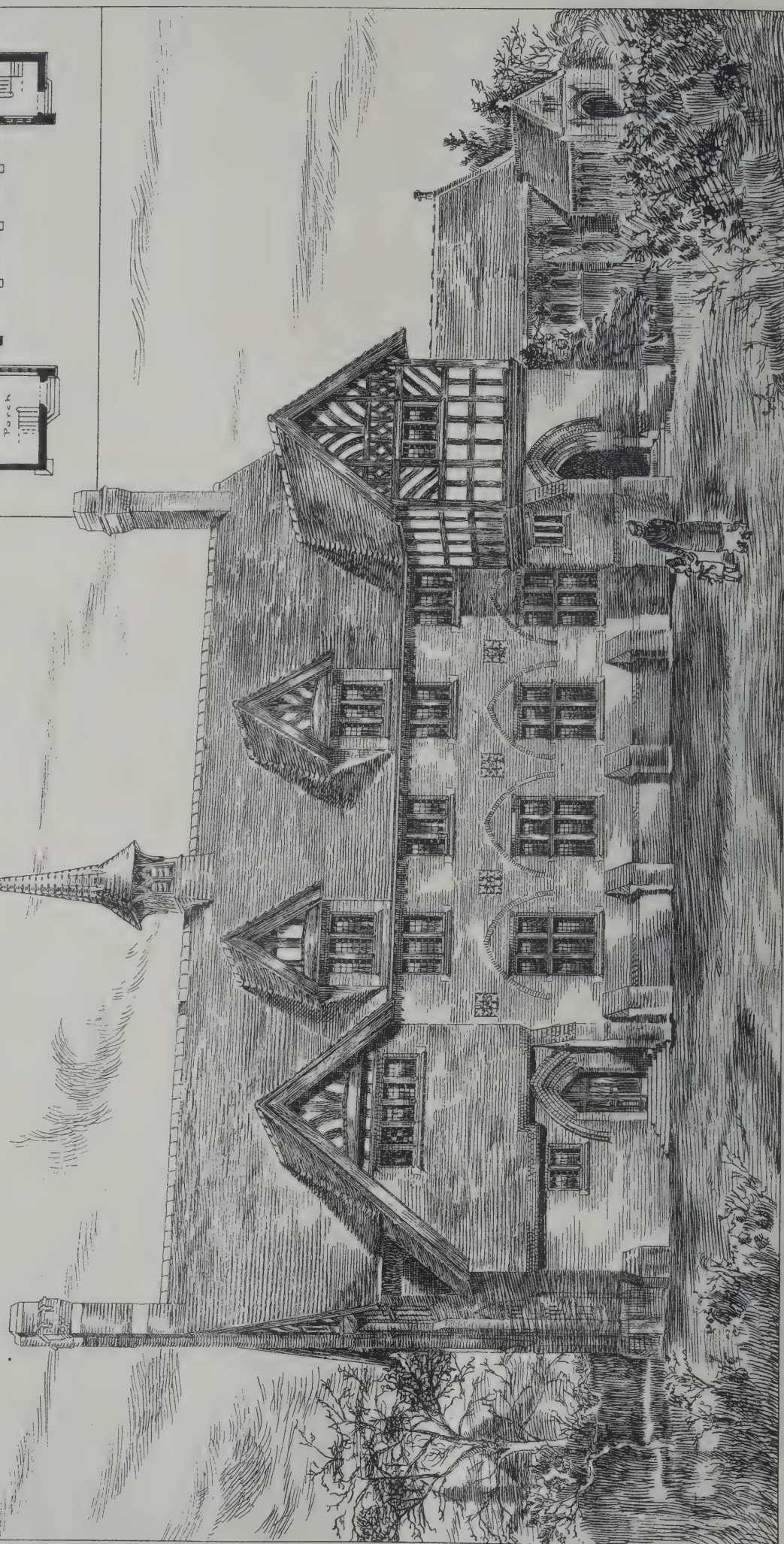
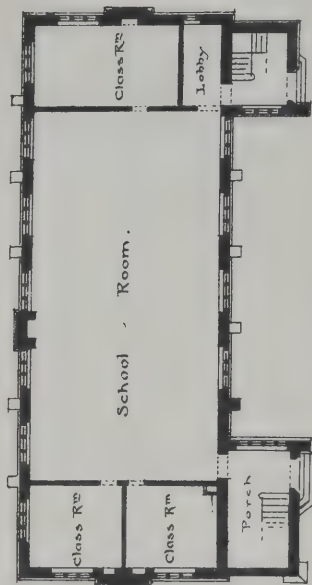






— New Schools at Peel nr Bolton. —

— R. Knill-Freeman, F.R.I.B.A. —

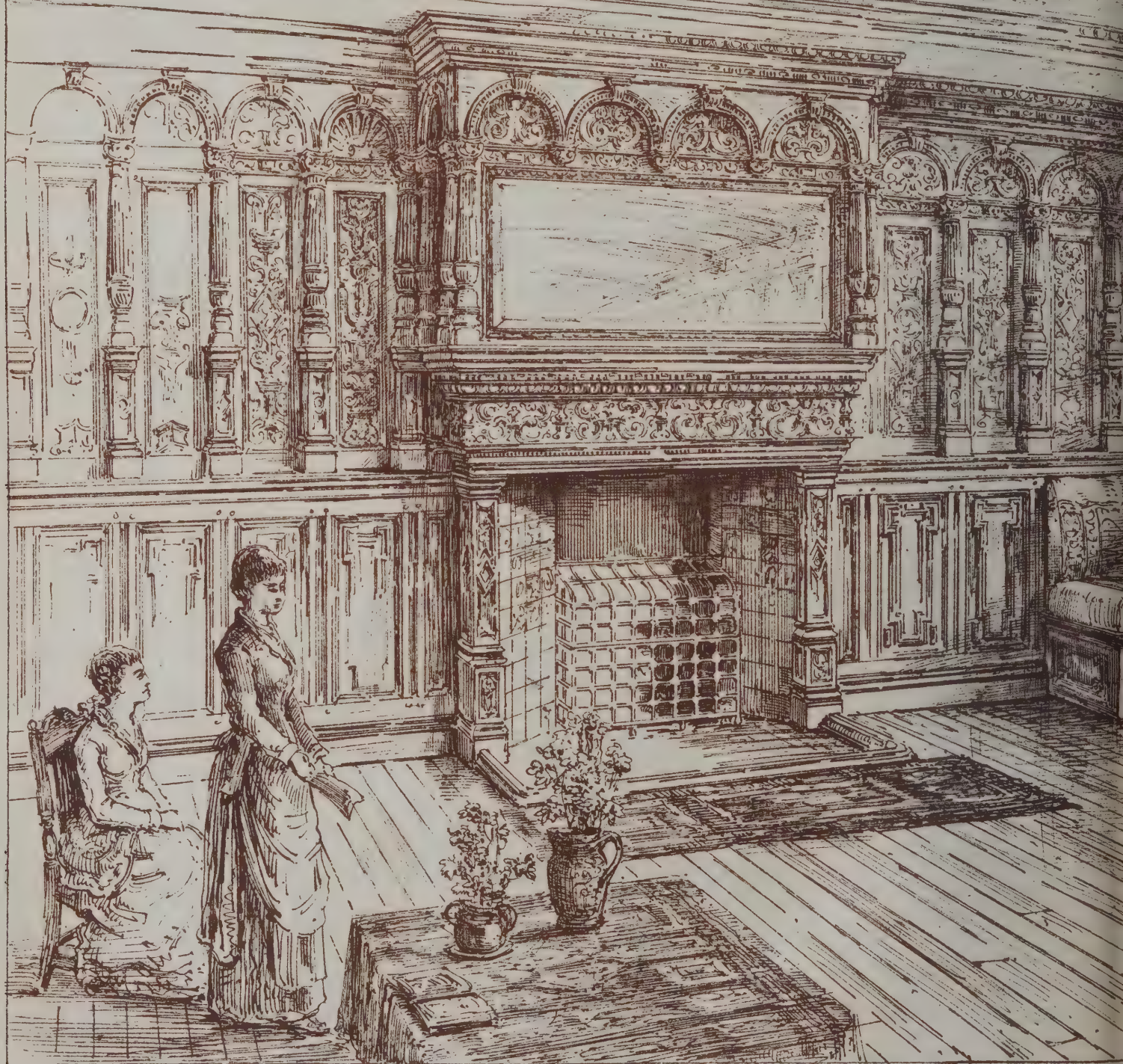






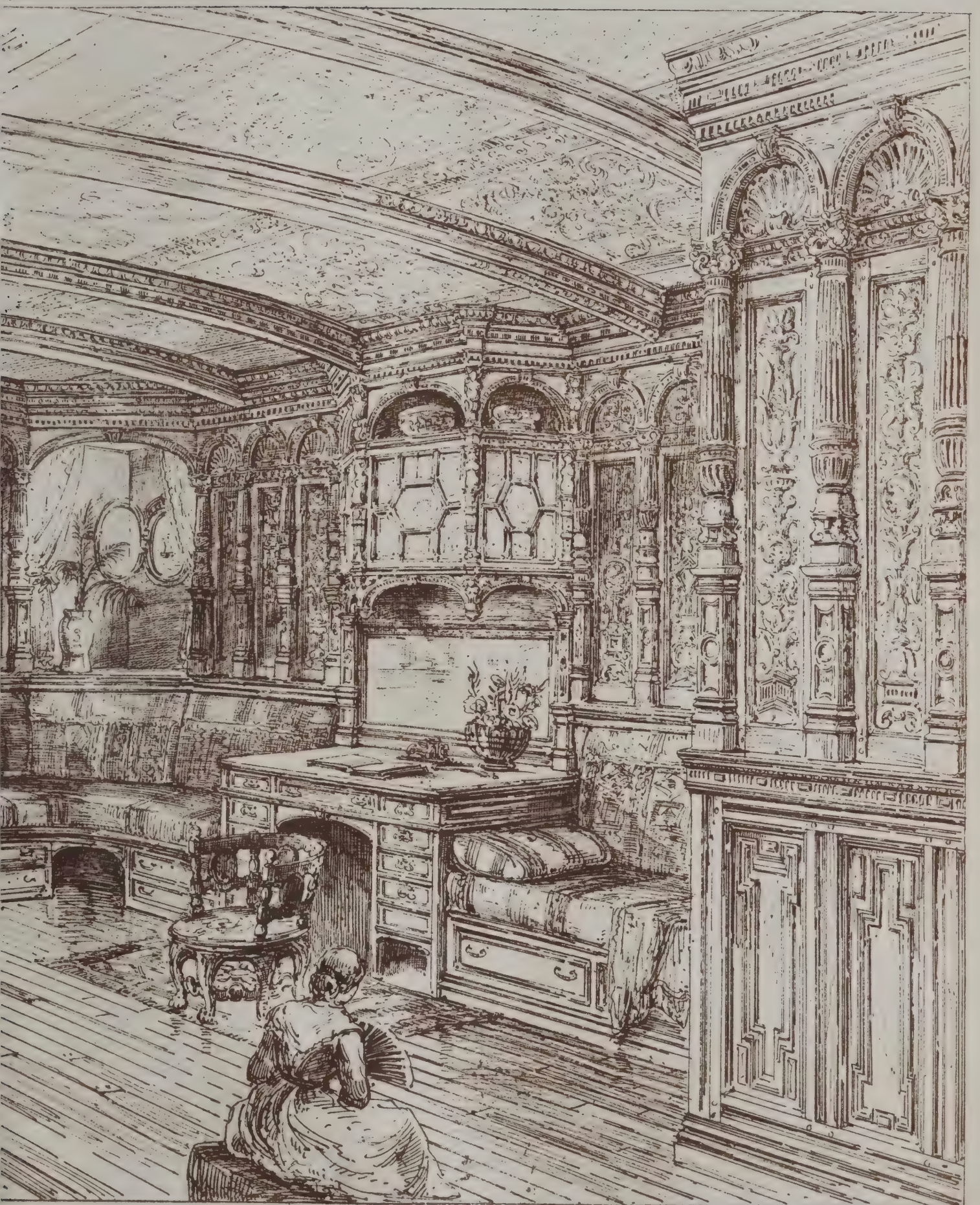


**YACHT for SIR ANDREW B. WALKER**  
**ERNEST GEORGE & PETO, Arch<sup>ts</sup>**





Oct 6<sup>th</sup> 1883.

















Vol 6<sup>th</sup> 1883.

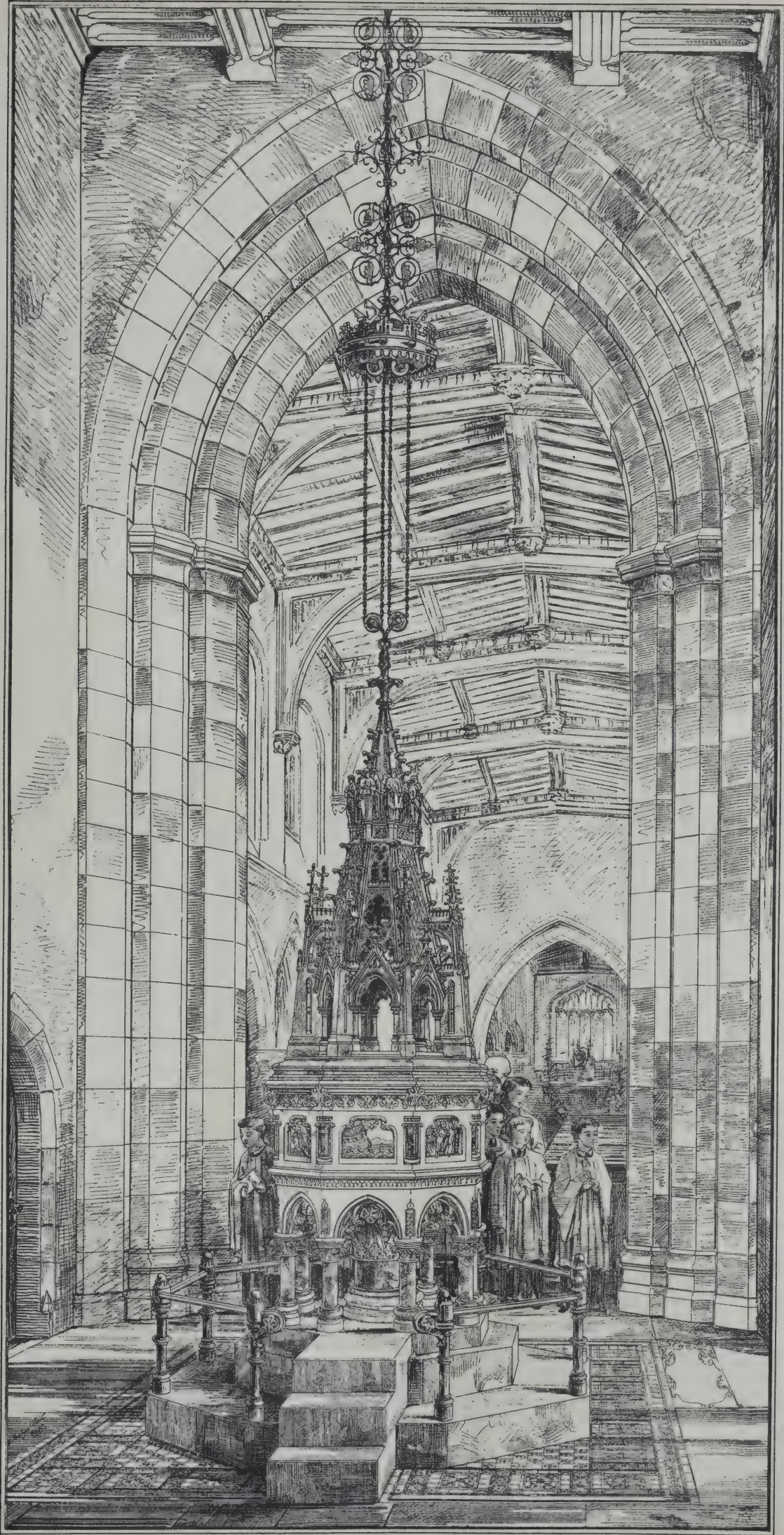
HARRINGTON GARDENS.  
W.S. GILBERT, HON. H. COKE, & OTHERS.  
ERNEST GEORGE & PETO, Architects.











NEW FONT, ST. MARY'S CHURCH, WATFORD.

MESS<sup>rs</sup> CHRISTOPHER & WHITE, ARCHITECTS.

*Jaques & Co. N. Martin Lane. Camm St. EC*







## ILLUSTRATIONS.

HARRINGTON GARDENS, SOUTH KENSINGTON.

WE have already illustrated some of the houses in Harrington Gardens, by Messrs. ERNEST GEORGE & PETO, and we now give another portion of the group by those architects. The houses all differ in size and in their arrangement, as well as in their treatment, but there is a unity about this picturesque composition. It is seldom that architects have the opportunity of bringing clients together so that their works, instead of being isolated, have harmonious surroundings.

The most complete internally of these houses is that for Mr. W. S. GILBERT. The porch and lobby lead into a spacious entrance hall, 22 feet by 20 feet, panelled with oak up to the top of the doors, with beamed ceiling and an ingle nook. The drawing-room, facing the garden at the back, 40 feet by 18 feet, with large mullioned bay windows, is panelled with solid rosewood, and has an alabaster hooded chimneypiece, carried up to the ceiling at one end of the room. On the right of the hall is the dining-room, which has a ceiling of curved beams. The lower portion of this room is richly panelled with oak, with stamped leather above same. The very handsome oak staircase, with moulded steps out of single blocks of oak, gives access off the first half-space landing to a boudoir, which has an oriel window looking down into hall, as well as one into the street. On the first floor is situated the billiard-room and oak-panelled study, with large bay windows, and also a very complete suite of bedrooms, dressing-rooms, bath-rooms, &c. Two of these houses are being carried out by Messrs. STEPHENS & BASTOW, of Bristol, and the other two by Messrs. PETO BROS., of London.

STOODLEIGH COURT, DEVON.

THIS house, which is now building for Mr. T. CAREW DANIEL, is most picturesquely situated among the fine rolling hills of Devonshire, about six miles from Tiverton. The house is arranged in the form of the letter L, and is built of stone quarried on the estate, with mullions and dressings of Ham Hill stone. The roofs are of red tiles. The hall, 60 feet by 26 feet, with open oak roof and large hooded fireplace at one end, and an arcaded gallery (giving access to the bedrooms along two sides), forms an important feature, and has a large bay in one corner, somewhat after the manner of the old college halls. Grouped round this hall are the drawing-room, 50 feet by 20 feet; morning-room, library, dining-room, &c., the billiard and business rooms occupying the corner between reception-rooms and offices. The kitchen, scullery, larders, &c., are arranged round a separate courtyard. The archway shown on the right of the picture gives approach to the stables. The contract for this work has been taken by Messrs. PETHICK BROS., of Plymouth.

NEW SCHOOLS, PEEL, MANCHESTER.

THESE schools, which are about to be erected at Peel, near Manchester, will take the place of an older building, which has become inadequate to the increasing population of the district. The new building will be of brick, with stone dressings, some parts being finished with timber framing. The roofs will be covered either with red tiles or with green, north country slates. In addition to the principal rooms the plan provides five class-rooms. The accommodation provided is for 618 children, and the estimated cost about 2,250*l*. Mr. R. KNILL FREEMAN, F.R.I.B.A., of Bolton-le-Moors, is the architect.

FONT AND COVER, ST. MARY'S CHURCH, WATFORD.

WHEN the parish church of St. Mary's, Watford, was restored, in 1869-71, by Mr. JOHN T. CHRISTOPHER, a new font was erected, the panels being left for future carving. This font has just been completed by the addition of a cover of elaborate design, carved in oak, and suspended by an ornamental chain working with a balance-weight enclosed in a corona, the whole of wrought iron and richly gilt. A kneeling-stool also carved in oak has been fixed to the steps. The font has been surrounded by a brass railing, and the old stone paving round the base has been removed, and encaustic tiles have been substituted. The eight panels in the upper part of the font itself have been filled with figure subjects in high relief, emblematic of baptism. The cost of these panels has

been borne by individuals interested in the church. The general expenses have been raised by public subscription. The sculpture and the cover and kneeling-stool have been executed by Mr. FORSYTH, of Finchley Road, who carried out the original work to the font. Messrs. HART, SON, & PEARD supplied the wrought iron and brasswork; Messrs. SIMPSON & SONS, the tiles; and Messrs. WATERMAN, of Watford, the necessary builders' work. Messrs. JOHN T. CHRISTOPHER and E. EMLYN WHITE, of Bloomsbury Square, are the architects.

## LONDON DWELLINGS.

THE subject of the address delivered by Professor T. Roger Smith as president of the Engineering and Architectural Section of the Sanitary Congress at Glasgow, was "London Dwellings." At the outset the clayey nature of the London soil was noticed. Combined with the large surface of water in the river and the docks, it rendered the London climate a decidedly damp one, notwithstanding the moderate rainfall. A most noteworthy idea of that dampness occurred in the famous November fogs, the worst of which produced a gloom worse than anything since the plague of Egypt. Perhaps the most strongly-marked London peculiarity was the desire to live, or to seem to live, in a house of one's own. One result of that was, that there was very little demand as yet for high houses, and that vast spaces of land were occupied by houses of two storeys high. Another peculiarity—in which, however, the Londoner only shared the national prejudice—was the universal use of open fireplaces. The result was of great advantage to each individual, but of serious detriment to the community. Every room had a ventilating tube, of a rough construction, of about one hundred inches sectional area, more or less, and that tended to secure a large amount of change of air in every room of every house; but the smoke from the fires which were lit in those countless fireplaces polluted the air, and made the London atmosphere unhealthy. There was also an universal prejudice in favour of the sash window, sometimes playfully called the guillotine, as compared with the casement window, which was equally universal in France. The sash was decidedly more advantageous for a damp climate, and was a better ventilator, whenever it was desirable to open the window a little way. Many, at any rate, of those who resided in the outskirts were remarkably ready to migrate from one quarter to another, so much so that not a few systematically changed their dwelling every three years. The result of that was that much less care was taken in the selection of a house, much less money was expended in remedying defects, and many more serious evils were patiently put up with than would be the case were persons more in the habit of living long in one house; in fact, but for that custom a great many serious defects, sanitary and otherwise, would hardly, he thought, have become quite so gross and serious as they actually were. The third element in determining the conditions under which the metropolis was built was furnished by the Acts of Parliament that regulated buildings and streets and drains, and the official administration of those Acts. His own impression was that in the parts of London within the metropolitan area legislation went as far, or nearly as far, as it could be usefully carried. But there were many points in which Acts of Parliament, however good, and however well enforced, failed, and must fail to secure the public against the effects of their own apathy in everything that related to the healthiness of their houses, combined with those due to the ignorance and cupidity of builders, who had no desire to do their work well, and little acquaintance with their duty. Legislation, he pointed out, could only require a certain minimum of excellence, and that which was just good enough to evade the penalties due to a breach of an Act of Parliament might yet be far enough from what it ought to be, or would be, if the public were at all critical as to the sanitary condition and general soundness of their dwellings. It was not the custom in London to buy freehold land for building purposes, unless it was for a public building. Land for dwelling-houses was always taken on lease. The usual term was far shorter than he believed was customary in the North. Eighty years was looked upon as a very long term indeed. Sixty years was a very usual term; but fifty, or even forty years were not unusual terms. Building leases rarely contained any provision for renewal or extension of the term; so, as a rule, the transaction amounted to this, that the freeholder lent his land for, say, sixty years on the conditions that he received an annual rental, that buildings such as he approved were put up, and that at the end of sixty years the land, with the buildings on it, reverted back to him. There were also usually covenants that, whatever was erected, shall be kept in repair by the person building. The rent charged for the land was termed a ground-rent. It varied according to the situation, between the extremely wide limits of half a penny, or less, to half a sovereign, or more, per superficial foot per annum; but in ordinary practice, for dwelling-houses it was about one-sixth to one-eighth of the rental which would be obtained for the house from an occupier, and it formed a first charge on the house, so that, if it be left unpaid, the freeholder could seize the house. As a consequence,



ground rents, being very amply secured, usually commanded a high price in the market. But there was absolutely no one whose permanent interest it was that the buildings should be sound, sweet, and safe to occupy. The original landlord was sure of his ground rents, and had no further interest; the middle-man, when he existed, and the builder, at any rate, sought to release themselves from any connection with the property at an early day; and the unlucky tenant, still more unlucky if he had bought the lease of his own house, found that there was no one to whom he could turn for any redress or remedy whatever went wrong. There was, indeed, one advantage which, on estates when landlords had a sense of public duty, the system of building leases did possess, and it was this. The landowners could lay down the conditions under which alone buildings should be put up, and could enforce them; but for one who did so in the interests of the public health and the welfare of the future occupiers of the houses, ninety and nine only framed such regulations as conduced to the benefit of their own pockets, and were careful to shackle the speculating builder with few or no conditions of a character which he might consider onerous, and which might, consequently, induce him to transfer himself and his building operations to some neighbouring estate. It might, perhaps, be asked where in that system did the architect come in. His answer was, nowhere. The bulk of London houses were not designed by architects, and not superintended by them. Describing London dwellings, especially those that had been some time built, he condemned the general sanitary arrangements in them, from the houses of noblemen to those of the very poor. If the model by-laws of the Local Government Board were uniformly adopted and efficiently carried out a great deal of good would be done. The public, however, had the remedy very much in their own hands if they only could be awakened. In short, the true cure for many of these evils was to be sought in the operation of an enlightened public opinion. Good was being done by the erection of houses in flats, though their advances had been less rapid than had been hoped by those who, like himself, advocated the movement in its early days. That began with buildings for labourers' dwellings, and had now extended to the middle-class and even to highly-rented dwellings. He had no hesitation in saying that the occupants of well-built flats were, on the whole, in much better sanitary circumstances than the majority of their neighbours in adjoining streets, who occupied rows of ordinary dwelling-houses. If it were possible to bring in the custom for leases for long terms, and to make landowners sensible of the responsibility which really rested upon them in respect of the houses they allowed to be built on their land, and if, in addition, they could induce capitalists to build as an investment, so that they would have a direct interest in the solidity of what was put up, then surely they might hope that what remained to be built or rebuilt in London would be better fitted for living in than the houses hitherto erected. Referring to the houses of the working classes of London, and the manner in which large areas were cleared for improvement, he said his opinion was, that even the tenements built by the Peabody Trustees, and unquestionably those built by most of the societies, were too good for the very poor, and that from those two causes, though no doubt they were improving London, they were not improving the condition of the labouring and poor inhabitants of the very areas which were dealt with. In conclusion, Professor Smith said London afforded now, and must for years to come afford, an ample field for the energies of those who devoted themselves to the pursuit of sanitary science, the diffusion of sanitary knowledge, and the performance of sanitary work.

A vote of thanks to the president was moved by Dr. Richardson, and seconded by Professor De Chaumont.

### SANITARY ASPECTS OF HOUSE CONSTRUCTION.

A PAPER entitled "Some Sanitary Aspects of House Construction" was read at the Sanitary Congress, by Dr. William Wallace, president of the Philosophical Society of Glasgow. He said that, granting that a house was well-drained, and that the plumber work was properly trapped and ventilated, what was wanted to make it a healthy residence was that it should have plenty of light, and that it should contain at all times air pure and dry, or at least as pure and as dry as may be possible. The subject of light might be dismissed in a few words. The importance of having larger windows was perfectly understood, and so far as isolated buildings were concerned it was unnecessary to say anything. But as regarded street architecture, it was of the utmost importance that houses should be built of a height bearing a direct relation to the breadth of the street in which they were situated. Hence the paramount importance of having enacted by Parliament rigid building regulations for cities and towns, in order to prevent the erection of tenements of such a height in proportion to the breadth of the street that the windows in the lower storeys got little or no sunlight. This was a subject which had been thoroughly discussed in this and other cities, and he hoped

that in course of time more stringent rules than we at present possessed would be enacted. A fair proportion in this latitude was that the house should not exceed in height two-thirds of the breadth of the street; thus giving three storeys in height for a street of 45 to 50 feet wide, and four storeys for one of 60 to 70 feet. As regarded the direction of a street, he should prefer to live in one placed as nearly as possible north and south. In this case, and taking the west side of the street as an example, the sun shone from morning till mid-day in the front, and from mid-day till evening in the back of the house. But in a street running east and west, the houses on the south side got scarcely any direct sunlight—in winter none at all—in front; while those on the north side were equally unfortunate as regarded the back rooms. No apartment could, in his opinion, be considered a perfectly wholesome one which did not enjoy direct sunlight during some part of the day. But if an apartment must be so situated that it could not have sunlight, it was some compensation that it had very large windows, so that it might get as much diffused daylight as possible. Purity of air could not be maintained in a house unless it were thoroughly dry. It was a common occurrence for the ends of joists built into porous stone to become affected by fungus vegetation; and it was frequently seen in pulling down old tenements that the ends of the joists were quite gone, and that probably for many years the joists had been resting only on the plaster cornices of the rooms. The remedy was the use of "shoes" of glazed fire-clay or other material, which was built into the wall, and into which the ends of the joists were placed. The porosity of building stone and brick was such that a cubic foot would absorb from 5 to 9 lbs. of water, or from half a gallon to nine-tenths of a gallon, while it permitted the passage of air or other gas by transpiration and diffusion. If, however, the stone or brick was saturated with water, the porosity was, for the time being, destroyed; or if there was any air diffused at all it would be loaded with watery vapour, and therefore of less value, in a sanitary point of view, than it would be with only its normal proportion of moisture. Besides that evil, there was the more serious one of the water actually reaching the joists and other wood, such as "dorks" and wall plates and straps, and causing those to decay, and so interfere with the stability of the structure. Coating the stone with oil, paint, silicate of soda solution, or other means of rendering it impervious to water, prevented the absorption of rain; but it also, at the same time, destroyed the valuable property of diffusing pure air into and impure air out of the house. The only way that he knew of for securing the advantages of the porosity of the stone and preventing the injurious action to which he had referred was to have double walls, with a space of a few inches between, into which air was freely admitted by openings in the wall at top and bottom, placed in such a manner that rain would not enter by them or lodge in them. It was a common observation that, in spite of every care being taken in the construction of a building, the joints of the stone were often imperfect and admitted water freely, especially when the rain was accompanied, as it often was, by high wind. To prevent the rain penetrating it was customary in some districts to build, not on a flat bed, but one sloping slightly upwards. That was a system highly to be commended; and if it was objected to on the ground of giving less stability to the building than working upon a perfectly level bed, that objection might be overcome by making the greater part of the bed level, with about two inches of the stone on the exterior side of the wall slightly bevelled. In the case of rubble walls the best that could be done, probably, was to point them with a mixture of Portland cement with twice its bulk of sand, taking care that the sand was not too fine, and then to whitewash the entire walls with Portland cement—a process which might be repeated with advantage. But the pointing should not be done until the walls had had a summer's sun and were practically dry; otherwise the greater part of the water in the walls would evaporate inwards—that was, into the house—and so keep the atmosphere damp for a longer time than was actually necessary. As regarded the interior of houses, plaster, whether on brick or lath, was exceedingly porous, and permitted of a ready diffusion of gases; and a wall merely whitewashed or coloured with distemper was better in a sanitary point of view than one that was covered with oil paint, which became by that process practically impervious to the passage of gases. Wall papers were probably not so bad in that respect as oil paint, but were certainly inferior to distemper or whitewash. The most perfect foundation upon which a house could be built was a solid platform of concrete, extending over the entire area of the building, and from 2 feet to 3 feet in thickness, according to the height of the walls, and coated over on the top with nearly pure cement. The sleeper joists should be placed at a sufficient height to obtain ventilation of the space below the floor. Another system which would probably prove equally good was to build the foundation walls and dwarf walls up to a certain level, fill in the interior spaces with broken material to the same level, and cover the whole surface with a layer of Portland cement with two parts coarse and three inches thick. Another system still was to place a damp course of slate or slaty stone, bedded in Portland cement, on the whole of the walls; fill up the whole foundation to the same level with broken material, and cover that, but not the walls, with asphalt. With regard to the ventilation of the



space below the basement floor, it was a safe rule to have gratings all round the building, if it was a detached house, not more than 10 feet apart; but if it was in a street where ventilation could be obtained only in front and back, the gratings should be not more than 5 or 6 feet apart, and should be of ample size, say 10 inches by 6. It might be objected that such ample ventilation as he had indicated would make a cold basement storey; but the simple remedy was to put ashes, with or without lime, below the floor, in the same way that deafening was applied to the upper floors. In a wet climate such as ours, in which it was a not uncommon occurrence to have half an inch of rain falling in a single day, it was a proper thing to cover the chimney-tops in order to prevent rain from coming down and keeping the gable walls to some extent constantly damp, and it was a good thing to combine with the cover a means of preventing down-draught in the chimneys during high winds. The cover which he recommended was one having a flat top with a section of a cone below, the whole chimney-top and cover being constructed of galvanised iron. All chimneys should be lined with fire-brick cylinders, very carefully jointed, otherwise a great deal of watery vapour from the combination of the coal would find its way into the gable walls, and there might be trouble also from smoke. In this brief sketch he had taken up only one branch of his subject, and he did not propose to deal with others, such as the ventilation of dwelling-houses and public buildings; but he should merely notice, in conclusion, an exceedingly simple means of ventilating apartments, which he found gave excellent results. It was to put in every window in a house a series of perpendicular holes, one inch in diameter, in the lower frame of the top sash of the windows. The holes may vary in number from three to six, according to the breadth of the window, and he might say that he had not found it necessary, even during the prevalence of the highest wind or during the coldest weather, to close any of these orifices.

### IRON CONSTRUCTION.

AT a meeting of the Society of Engineers held on Monday evening, October 1, 1883, in the society's hall, Victoria Street, Westminster—Mr. Jabez Church, M.Inst.C.E., F.G.S., president, in the chair—a paper on "Designs, Specifications, and Inspection of Ironwork," by Mr. Hamilton W. Pendred, was read, and of which the following is an abstract: Although engineers and contractors approach each other in knowledge more nearly now than formerly, the engineer possessing more practical and the contractor more theoretical knowledge, each has even yet a good deal to learn of the other; the engineer, however, having in many cases most to learn of the other; and hence a good deal of needless friction often exists between contracting parties. The first object of the engineer is to obtain a lasting and sound piece of work, while of necessity the contractor has to study the least expensive methods of putting work together. Very often contractors can and do give engineers useful practical hints and suggestions, which, however, are not always taken in a friendly spirit. Drawings ought to be as complete and to as large a scale as possible, and some extra days spent on perfect drawings saves weeks of work and much correspondence, mistakes, and heart-burning afterwards. Wherever possible all the design ought to be perfected at once, leaving nothing to be subsequently done, for contractors have a reasonable objection to having the work hindered; and this does happen often if parts of designs are left over for further consideration. With regard to details, iron ought to be worked by the smith as little as possible, as every heating and hammering injures the fibre. Angle irons are often bent without any adequate need for it, and the straighter all the parts of an iron structure are, the easier to rivet up soundly. Joint covers are often carelessly designed and badly fitted, yet they are very important items. Specifications sometimes have badly-worded clauses, and demand things utterly impracticable, such, for example, as stating that all the parts shall be drilled in the position they will actually occupy in the finished structure, and contractors read such specifications with contempt. Another absurd stipulation requires that all the plates shall, as soon as they are rolled and sheared, be dipped while hot into oil. No mill with which the author is acquainted has any appliance for such oiling. The oil, too, where applied, makes a dirty scum hard to scrape off, and, being sandwiched between the plates, prevents sound, tight rivetting. In respect of rivets, specifications demand that they shall be made of iron capable of enduring a tensile strain of so much. This is not wise. The proper thing is to demand that all rivets shall be capable of being bent quite round and closed down cold under a hammer without cracking. As regards methods of work, every contractor has his own method, and the engineer had better leave this to him. As to fastening the cross girders to the main girders, in some cases they rest on main angle irons at one side of the main girder, and are rivetted to the side web—this tends to cant over the main girders. Underhung girders are free from this, but they must be very carefully bolted and rivetted, as bolts and rivets are the only support. In the author's opinion, fish-bellied girders are not advisable—the shape is more troublesome than the plain, straight girder. As to rivetting,

machine rivetting, wherever it can be resorted to, is best; but the work must be most carefully bolted up for rivetting, otherwise the rivets will be left loose. The heads of rivets (either machine or hand) ought to have their ends snapped to a sufficient depth, and the workmen must be carefully watched as to this, for it is easier for them to rivet short rivets than full ones. The words "no drifting will be allowed on any account" in a specification are absurd, it being wholly impossible to put work together without it; but the drift is often recklessly used. As to cast iron, this material seems to be going more and more out of favour—undeservedly so, the author thinks, for some purposes; but castings are often badly designed, the metal not being disposed to the best advantage, and the material is blamed for the faults of the designer. Lugs cast on columns are not good, and the Tay Bridge disaster proved this. Columns, too, are often carelessly cast, and fail as a consequence; and no part of a contract demands more attention from an inspecting engineer than the casting of these columns. In conclusion, the author invited discussion upon what is called the dispute clause of a specification, which constitutes the engineer sole and absolute judge, from whom there is no appeal. This clause contractors frequently repudiate, as being unjust and illegal.

### LOW CEILINGS.

THE paper by Mr. Honeyman on "The Advantages of Low Ceilings in Small Houses," which was read at the Sanitary Congress, gave rise to more discussion than any other paper.

Dr. Simpson said that Mr. Honeyman's paper struck at the very root of the principles of sanitary science, as he would have them to build streets in which the houses were to be only 20 feet wide and seven storeys in height. Now this was just going back to the old evil which it was thought they had experienced quite enough of. Dr. Wallace's paper very effectively replied against that system, as he had shown that with such houses the street below seldom or never got any sunlight, which was necessary for human existence. Nothing was more depressing than want of light, and it was known that when it was desired to quiet a lunatic he was just put into a dark place and it quieted him soon enough. The narrow houses advocated by Mr. Honeyman would lead to overcrowding, and this, coupled with want of light, would lead to many difficulties.

Professor James Thompson said Mr. Honeyman's object was to give more floor accommodation by reducing the height of the ceilings, and thus getting a larger number of people to live in a limited space in large towns. When it became necessary to pack people closely together, it became desirable to make the most of a small space. Personally he would advocate to the very utmost that political economists and the corporations of towns should aim above all things at avoiding and preventing overcrowding, and creating as many open spaces as possible. Anyone could see while walking along the streets of Glasgow that the children of the working classes had no place where they could go to play but the pavements. It was all very well to say that it was desirable to have open spaces for playgrounds, but, on account of the cost, it was difficult to get them; yet the idea was not such a hopeless one as many people supposed it to be. Mr. Honeyman's recommendations were in a great degree of some account as to making the most of small spaces. It was certainly unwise to aim at having a high ceiling with a large portion of cubic space kept only for the accumulation of vitiated hot air, allowing the air for ventilation to flow along the floor about the people's feet and legs before finding its way into the fireplace. The warm air generated by the fire or gas, and more or less vitiated, was breathed by the people, and any person could test it for himself by getting up on a table or ladder near to the ceiling.

Mr. E. C. Robins held that overcrowding had been proved to be unhealthy, but it was still possible to crowd healthy houses together, such as had been done in the case of the artisans' model dwellings. He criticised adversely the manner in which Mr. Honeyman proposed to provide for ventilation, and suggested that in such houses fresh air might be introduced at the back of the fireplace, and heated before it was allowed to pass through the rooms.

Dr. Sutherland maintained that Mr. Honeyman's paper struck at the very root of sanitary science. Mr. Honeyman had made the statement that he had seen in a street twenty feet wide an admirable tenement of artisans' dwellings seven storeys in height. That meant a wall of 56 feet high, with people from the basement to the top who would be deprived of sunlight during the greatest part of the day. He hoped the Institute would not allow it to go to the public that they encouraged such tenements. They should rather welcome such restrictions as were imposed by the authorities in regard to the height of tenements in various streets. If the attention of Parliament had not been directed to the admirable tenement Mr. Honeyman had mentioned, the sooner that was done now the better.

Mr. G. W. Muir said he approved of the style of room indicated by Mr. Honeyman, and remarked that the healthiest room he had ever lived in was one 7 feet 3 inches in height. Although



sunlight was a very good thing, it was not the only thing that had to be considered. He was not aware of any street in which it was not the case that the sun did not shine during some part of the day. This house of seven storeys in a street of 20 feet width might be a much more healthy house than a one-storey cottage in the same street. Crowding was quite consistent with the maintenance of health, provided attention was paid to ventilation.

Mr. Honeyman said he could only partially reply to the remarks made on his paper. There seemed to be a good deal of misapprehension regarding what he aimed at. His object in bringing up the subject was that it might be the means of preventing overcrowding, which to a great extent was due to the raising of rents. Nothing more certainly led to the kind of overcrowding which resulted in a high death rate than high rents. During the depression in trade which followed the City Bank disaster, many people could not keep houses for themselves and went to stay with relatives, but they again took houses when trade got better and enabled them to do so. If the people could be healthfully housed in high tenements it gave larger spaces round about the houses. Instead of a dingy range of houses, with a meuse lane running up between them, he would build say three blocks on the space, and leave large spaces between them. As to the tenement that had been referred to, it was in Gray's Inn Road, London. He had never seen anything better in the way of dwellings, as the houses were perfectly cleanly, bright, and airy in every respect. As to ventilation, he did not advocate the use of a ventilator at all. He would take a little bit off the top of the door, which the people would know nothing about. If a ventilator was put, the people would be sure to close it up. He had made experiments, and found that there was always more heated air in the room with the higher ceiling.

The President (Professor T. R. Smith) said he had had to do with the administering of an Act of Parliament while acting as a district surveyor in London, and it struck him that the less restrictive any legislation could be made the more likely were the Acts to be of service. They were beset with very great difficulties in dealing with the problem of how to house to the best advantage the poor in large cities. One would like to see them in the best possible dwellings, but these cost a great deal of money. They were compelled to provide a dwelling within the reach of the wages the people could earn, and Mr. Honeyman was evidently aiming at attaining to that.

Lord Provost Ure, at the evening meeting (after a lecture by Dr. Richardson), referred to the same subject. He said they had been told that to pack the population closely together was not likely to increase the death-rate. His own experience had been very different from that, and so were his views. He had found that in their great towns, when they packed one place with people it did a great deal to increase the death-rate. He could not conceive that the breathing-space that one man needed should be curtailed, and that a dozen men or women should be made to live where only one should be. That could not be good for the people. They had also been told that it would be to their advantage to have four-flat houses rather than houses with only one, and that it was possible to put upon a square acre of ground upwards of a thousand people, all of them living, and living in good health. He denied that. With their model buildings in London they might so pack the people, but they would have to see that it was model people they were dealing with. There would have to be no drunkenness, or anything to disturb the equanimity of life, but, on the contrary, all things would have to move with the most perfect regularity. They might then in that way have a good deal of health about the place, but they must have an enormous amount of open spaces surrounding it. If they had not open spaces the thing would not do, and it was well enough known that in all Scotch towns they had not got such spaces. They had, on the contrary, got into the system of building their houses in flats, and it was with the greatest bitterness and sorrow that he saw springing up in the southern towns buildings of the same sort. Depend upon it, the cottage system of dwellings, which they possessed in England, was the right one, both morally and physically.

Mr. Honeyman, in a letter to the Glasgow papers, writes: I regret very much that the Lord Provost should have renewed the discussion on my paper last night, when I was debarred from replying or offering one word of explanation, and I also regret that he and others should so far have misunderstood the purport of my remarks as to imagine that my object was to advise, as a matter of general expediency, the erection of lofty tenements in narrow streets. What I did attempt to prove was that, other things being equal, and altogether apart from the question of free spaces, a room with a low ceiling is superior to a high room of the same cubic capacity, in these respects—1st, extent of floor space; 2nd, comfort; 3rd, purity of air—all directly affecting the health and "felicity" of the occupants; and lastly (where it is permissible to have high tenements), cheapness, more than anything else the preventive of overcrowding. Now, I am prepared to name scientific men of the highest eminence, some of whom are members of this Congress, who agree with me in this; and if the Lord Provost will name one who, after discussing the matter with me, will maintain the contrary, I shall for ever hold my peace. That, I think, is a sufficiently distinct issue. Unquestionably the

more free space we can secure without making rents an intolerable burden the better; but there are circumstances, as I endeavoured to show, which justify the erection of tenements as high, and with as great a restriction of free space as experience has proved to be consistent with healthy conditions; and this length I go for the very purpose of preventing that worst species of overcrowding which certainly results from high rents. I referred to what has been accomplished in this way elsewhere under many disadvantages, not because I wish to see defects imitated, but only to emphasise the absurdity of regulations which would prevent the erection of such tenements here even in streets 60 feet wide, and with acres of free space around. No doubt the Lord Provost is right when he says that the blocks of improved dwellings in London are to a large extent occupied by a superior class of artisans, and that their very low death-rate is partly due to that circumstance; but let it not be forgotten that these healthy dwellings have to a large extent taken the place of the most wretched insanitary hovels, and are still surrounded by the miserable abodes of the very poorest; and it must surely be obvious that they are not merely a blessing to those who occupy them, but to the districts in which they are situated, standing out as a protest against sanitary abuses still unreformed, and planting amid their infelicitous surroundings an element of order, sobriety, and good living, the influence of which cannot fail to be altogether beneficial and wholesome. If the citizens of Glasgow understood this matter aright they would, I am convinced, join with me in demanding that our authorities should state at least one good reason why the erection of such blocks of dwellings here should be absolutely prohibited.

## HITTITE ANTIQUITIES.

A PAPER was read on Tuesday at the Church Congress, Reading, by Sir C. W. Wilson, R.E., under whose direction the survey of Palestine was conducted for some years. In the course of it he said:—

Little is known of the Hittite power in Asia Minor; it was probably at its height in the fourteenth century B.C., but must have been profoundly shaken by the great victory of Rameses II. at Kadesh, which, according to the striking epic of the contemporary court poet Pentaur, broke "the back of the Khita for ever and ever." The tendency of such a defeat must at any rate have been to weaken the influence of the Hittites over the Mysians, Lycians, Dardanians, and other tribes of Western Anatolia, who fought with them on that occasion. It would appear, from the Assyrian records, that the Hittites gradually split up into a number of independent tribes or states, such as the Cilicians, Moschians, Tiberenians, Comanians, the people of Commagene, and others, who are mentioned in the annals of the wars of Sargon and his successors; the final extinction of their power, however, appears to have been due to the inroads of the Cimmerians and Scythians, and they afterwards formed part of the Median empire, which extended to the Halys. So complete was their overthrow that even their distinctive name was lost, and they appear in Herodotus and Strabo as Leuco-Syrians, Cappadocians, Cataonians, &c. The widespread influence of the Hittites may, however, be gathered from their monuments; the inscriptions on the monument at Karabel, the Sesostris of Herodotus, on the old road from Sardis to Ephesus, and near the Niobe in the Valley of the Hermus, show that they penetrated to the Ægean, and there are certain indications that Sardis was once in their hands. The next monuments are those at Giauour Kalessi, between Sivrihissar and Angora; and then follow the interesting remains at Boghazkeui, near Yuzgat. The ruins at Boghazkeui, of which Herr Humann, so well known from his excavations at Pergamos, made a plan last year, are quite unlike those of an ancient Greek city; they cover a wide extent of ground, and have more in common with cities like Babylon and Nineveh than with the typical Greek city gathered round its acropolis. The walls are still standing to a considerable height, and there are underground means of exit which offer several interesting features; there are also the foundations of a large temple, constructed of massive stones jointed together in a peculiar manner; and a long inscription in which, though almost obliterated, several Hittite symbols are distinctly visible. The rock sculptures, of which casts were taken by Herr Humann, are a series of religious representations, with Hittite symbols above the gods and goddesses. The majority of the figures are female, and amongst them are twelve of the armed Amazons who played such an important part in the religious worship of Asia Minor. In one figure can be recognised the "effeminate character, the soft outlines, the long sweeping dress, the ornaments of the eunuch high priest of Cybele;" and in another the warlike goddess Cybele. Not far from Boghazkeui are the ruins of Uyuk, with the curious sphinxes which, though made after an Egyptian model, differ widely from the Egyptian type. Uyuk is interesting as the only instance of what may be called a Hittite mound building in Anatolia, and shows us that, contrary to the practice in Assyria, the Hittites placed their sculptures so as to face outwards. To this peculiarity of construction is probably due the almost universal



selection of trachyte or basalt for the sculptures instead of a softer stone; the only exception is, I believe, at Jerablûs, where some of the slabs are of limestone. In Pontus there are traces of Hittite art in two small slabs, which I found at Kaisariyeh, but which came originally from the neighbourhood of Amasia. At İflâtûn Bûnar, near the Lake of Beischeher, there is a large monument of Hittite origin; and at Ivriz, near Eregli, there is a well-preserved, rock-hewn monument, representing a thanksgiving to the god who gives fertility to the earth. "The god is a husbandman, marked as giver of corn and wine by his attributes; and the gorgeous raiment of the suppliant priest, praying for a blessing upon the country and people, is purposely contrasted with the plain garments of the god." The god wears the very dress still used by the peasantry of Anatolia; the high-peaked cap is still in use among some of the Kurdish tribes; the tunic fastened round the waist by a girdle is the present loose garment with its *kummerbund*; and the tip-tilted shoes are the ordinary sandals of the country, with exactly the same bandages and mode of fastening. The sandal is very like the Canadian mocassin, and the long bandage wound round the foot and ankle is the equivalent of the blanket sock; it is the best possible covering for the foot in a country where the cold in winter is intense, and the snow lies on the ground for a long period; and as it appears on all Hittite monuments, I think it is an evidence of the northern origin of the Hittites. It is interesting also to notice that some of the patterns on the priest's dress have not yet gone out of fashion amongst the Cappadocian peasantry. At Bor, between Eregli and Nigdeh, Mr. Ramsay, whilst travelling with me last year, discovered a new inscription which, unlike all other Hittite texts hitherto known, is incised and not in relief; near the silver mines in the Bulghur Dagh is another inscription, and at the mouth of a curious gorge close to Gurun, near the head waters of an arm of the Euphrates, I found two others. It is, however, south of the Taurus, between that range and Aleppo, and eastward to the Euphrates, that the most numerous traces of the Hittites are to be found; near the eastern extremity of the Bagtché Pass, by which Darius crossed Mount Amanus, when he came down in rear of Alexander's army before the battle of Issus, I visited a large mound on which a long row of Hittite sculptures, representing a hunting-scene with great spirit, was standing *in situ* here as at Uyük facing outwards; a few miles beyond, on the road to Aintab, I saw other sculptures taken from one of the mounds. The district between the Giauour Dagh (Amanus) and the Kurt Dagh contains a large number of mounds; in a small area I counted eight, which I feel sure would well repay excavation. The slabs are all small, and could be easily conveyed to the coast; but, unfortunately, the British Museum has not seen its way to excavate, and the question is now, I believe, being taken up by the Germans. At Marasch, near the foot of the Taurus, several Hittite slabs have been found, and between Aintab and Aleppo, and towards the Euphrates, there are many large mounds, evidently of Hittite origin, including Tell Erfad, Arpad, and Azaz, the Khazaz of the Assyrian monuments. Several slabs have reached this country from Jerablûs, but the excavations at that place, owing to want of skill and inexperience, have not been so fruitful in their results as might have been expected. Jerablûs is generally identified with Carchemish; but unless a distinct statement is found in the Assyrian inscriptions that that city was on the Euphrates, I would place it at Membij, the ancient Hierapolis, a site which impressed me more than any other I visited west of the Euphrates. Hittite inscriptions have also been found at Aleppo and Hamath, and I think the slab obtained for the Palestine Exploration Fund from Tell Salhiyeh, near Damascus, is also Hittite.

A few words may now be said of the origin, religion, language, &c., of the Hittites. I fully agree with Professor Sayce in considering that the Hittites of Northern Syria and Palestine were intruders, and that they came from the Anatolian plateau east of the Halys, which was occupied by Hittite tribes from the Black Sea to the Mediterranean. This view of their northern origin is supported by their physical appearance, as depicted on the monuments, by the mocassin sandal already noticed, and by the fingerless glove, which is still commonly used by the peasantry, and is found in all cold countries. The sculptures show that the Hittites did not belong to a Semitic race. The features are rather those of a northern people, and on the temple of Abusimbel the Khita have a very Scythic character, with shaven hair and a single lock from the crown. This peculiarity in the mode of dressing the hair is not seen on the Hittite monuments; but at Karnak and Thebes I noticed figures with the same type of feature as those on the monuments in Anatolia. It would be very interesting, and I hope it may be done some day, to obtain casts of the various types of face represented in the war pictures of Rameses II.; they are very varied, and a careful comparison could not fail to be of value. Amongst some pottery dug up at Tarsus about thirty-five years ago is a head which seems to have been a likeness of a Hittite, as it gives the full lips and the large thick nose, with a sharp curve at the end, which is found on the monuments. The type, which is not a beautiful one, is still found in some parts of Cappadocia, especially amongst the people living in the extraordinary subterranean towns which I discovered last year

beneath the great plain north-west of Nigdeh. The religious belief of the Hittites, and its influence on the people of Western Anatolia, and through them on the Turks, has been described, as far as it is known, in papers by Professor Sayce and Mr. Ramsay. I would only suggest now, as a subject for examination, how far the peculiar religious rites and observances at the two Comanas were of Hittite origin; at each place the priest was at least co-ordinate with the king in rank and religious power, as appears to have been the case with the Hittites; and at Amasia the most magnificent tomb is that of a high priest. I do not know whether there was any peculiarity in the faith professed by the early Christians of Cappadocia, but it may be more than a mere coincidence that the country between Boghazkeui and Comana Pontica is inhabited by an indigenous people who, nominally Moslems, profess a religion which, as far as I could learn, approaches more nearly that of the Ansariyeh than any other. That the Hittites had made considerable progress in art is attested by their monuments, and we may infer from the fact that before the Cimmerian invasion Sinope was one of the principal outlets for the produce of the East, that they were a commercial people; the trade route seems to have passed through the Cilician gates to Kaisariyeh, and thence by Boghazkeui to Sinope. It would appear from the proper names on the Assyrian and Egyptian monuments, that the Hittites did not speak a Semitic language; the language was probably that of the Leuco-Syrians and Cataonians, and allied to the "speech of Lycæonia," which was in use, in the time of St. Paul, and it possibly lingered on until the complete Hellenisation of the people under the Byzantine Empire. Little progress has yet been made in deciphering the inscriptions, but there is every reason to hope that success will attend the efforts of Professor Sayce and other workers in that direction, and we shall then have a flood of light thrown upon a people with whom the Israelites at one time intermarried, whose religion some of them adopted, and with whose history that of the Jewish monarchy was, on several occasions, intimately connected.

#### SMOKE ABATEMENT.

A PAPER was read by Mr. W. R. C. Coles at the Sanitary Congress on "Smoke Abatement." It was, he said, desirable to consider the actual cause of the evil and the probability of its abatement. As smoke was but the expression of defective heating processes, by its production these processes stood condemned. They must be improved. They must face the true issue. The production and application of heat must become raised to the level of a recognised and rewarded art and industry before the ultimate success of the smoke abatement cause could ensue. The very term "smoke abatement" was in a sense misleading, for it pointed but to an expression of evil—not to its cause. "Heat cultivation" would more correctly indicate the underlying and governing principle on which thought and action must be based if they would intelligently address themselves to rid the atmosphere of smoke and secure the advantages attaching to that great object. In a broad sense it had been hitherto, and still was, the practice to obtain heat merely by heaping crude coal on a fire, regarding little the true character of the fuel, the apparatus in which it burned, or the duty actually required. So long as there was heat enough for the purpose in view that was deemed sufficient. The strictly exact and beautiful natural process called "combustion" would not submit to such usage, and it punished man in purse and in person to teach him to use his intelligence and amend his ways. The greatest barrier to legislative reform was the manifestly unfair basis on which smoke law had hitherto always stood, namely, that it had been levelled against certain trading classes of the community also. As a rule they looked upon the smoke laws as an irksome and unfair restriction on trade; and so long as they could by any means avoid penalties, they practically did no more to advance the object of the legislation. It seemed to have been generally accepted in the past and to remain now a fixed idea, that the smoke from domestic chimneys could not be checked or dealt with at all by legislation. It would be wholly unreasonable to consider even the possibility of passing an immediate law to absolutely restrain smoke from private houses now existing. Were it even to be passed it manifestly could not be administered. But the late Home Secretary (now Lord Aberdare) said: "Supposing it can be shown that grates as cheap or cheaper than the present ones have been invented and could be applied, and that the result of using them would be an economy of fuel, we have then to consider whether the foundation has not been laid for the gradual application of compulsion." These words were worthy of consideration. In the case of new houses, at any rate, a great check might readily be imposed by the united forces of public opinion and suitably restrictive legislation. The Government had set the example in the abatement of smoke by announcing that tenders for the new Admiralty and War Offices must provide for most improved heating arrangements. Regarding the possibility of carrying out the reform in a thorough and practical way, they might be encouraged by the success which had already followed the efforts put forth. It might be accepted as a fact that the attention which



had been directed to the subject had resulted in a large extension of knowledge and marked improvements in all classes of heating apparatus. It was generally admitted that our heating processes were, for the most part, primitive and unsatisfactory, and cheaper, less cumbersome, and more readily manipulated methods of applying heat are becoming more and more essential in all domestic and industrial operations. The official reports of the Smoke Abatement Committees of London and Manchester were highly instructive and suggestive. For instance, it was shown that some domestic grates burn three times as much coal as others do, and produce six times more smoke; that some gas stoves burn nearly three times more gas than other stoves, and that some steam boiler furnaces burn more than twice as much coal as others for equal work; and that while some produce a great deal of smoke, others are practically smokeless. So far as the use of gas could be made available for reduction of smoke at Glasgow there was an encouraging prospect, for the name of Mr. Foulis stood high in the gas world as an admirable manager of gasworks; and under his scientific development of gas manufacture the well-known system of heating the retorts, invented by Sir William Siemens, had been introduced on a larger scale than at any gasworks in the kingdom. Moreover, the coal of the country was suited to gas-making, and the manufacturers of gas apparatus in Glasgow were among the largest, if not actually the largest, in the kingdom. The review of heating systems had already led to the discovery or recognition of various collateral advantages being associated with changes tending to the prevention of smoke. Among them might be mentioned that in the manufacture of coke a saving of several millions sterling could be effected by the collection and condensation of the volatile constituents of coal, now poured into the atmosphere in the form of smoke; the development of furnaces suited to utilising inferior coal and gaseous fuel, and the introduction of appliances for labour saving.

Dr. Carpenter said there was no reason why the chimneys of manufactories should send out smoke. It was a matter which the people themselves could settle. With regard to domestic chimneys, there was a difference of opinion. It was quite certain that they could not indict the whole people, and therefore he would press on the Congress a point that he pressed on the Society of Arts three years ago, but which did not meet with much favour. Still he considered it was the right one. The large proportion of smoke in large towns—and this interested not Glasgow alone, but also London, which from its large extent was becoming a forest of houses, or, as one gentleman had called it, a desert of houses—tended to produce fogs, and he believed these were sometimes more dense in London than they were even in Glasgow. How was that to be done away with? His impression was that if the Legislature gave the local authority power to license chimneys to discharge smoke into the atmosphere, and let the produce of the licenses belong to the local authority for the purpose of reducing the cost of sanitary operation in the particular district, he thought they would soon find the smoke nuisance would be very materially abated. They would also find that the appliances which science had brought out, such as stoves and warming apparatus, would soon get rid of a very large amount, say four-fifths, of the smoke that arose from the domestic chimneys. They would also provide a source of profit to the local authority from those who liked to have their open fire, and have the privilege of poking it. That to some extent was one of the sources of smoke, and it would be more beneficial and less costly to the owners of poor property to have smoke-consuming fireplaces, or that cooking should be carried on by gas. They would then have a very large amount of that smoke removed from the atmosphere without any of those various changes which had been suggested—that of laying on very heavy penalties against the offenders and preventing people having a fire to look at if they liked. He thought the plan he had suggested would be found in the end to abolish the smoke nuisance more effectually than any others they could think of.

Dr. Angus Smith said what they desired most in nearly all the branches of sanitary inquiry was a proper series of experiments, and these, he believed, were all carried out for small fireplaces by the Smoke Abatement Committee. Larger experiments, which were very expensive, could perhaps only be made by those who had large works, and were able to spend a considerable amount of money upon them. There were different kinds of smoke—black and grey smoke—and as the colour was different the composition was different. In house fires the combustion was not sufficiently strong, the oleaginous matters were not sufficiently heated, and the smoke of a black colour was produced. Any method which increased the heat of combustion would enable them to get rid of this black smoke. He found that in most towns those who were entrusted with the duty of putting down smoke were smoke consumers themselves, and it was, therefore, difficult to get these Acts put into operation. He looked more, however, to invention and to the spread of knowledge amongst the people than to legislation for improvement in this matter.

The Sheffield School of Art still requires 150*l.* to make up the 1,000*l.* for which an appeal was issued in May.

## LEGAL.

Hereford County Court.—Sept. 25.

(Before Mr. ROGERS, Judge.)

WELSH v. EVANS.—WILLETT v. EVANS.—EVANS v. WILLETT.

These cases related to the same work. In the first case one builder brought an action against another for balance of account for erecting a house. On February 25 a certificate was given that the house which plaintiff built for defendant was finished. When plaintiff asked for his money, defendant pleaded shortness of money, and continued to do so until the action was brought. An order had been signed fixing the back work at 15*l.*, and the only items now in dispute were 26*l.* 0*s.* 4*d.* and 5*l.* 5*s.* 9*d.*

Mr. Parker, the city surveyor, to whom the matter had been referred, reported that he had had to decide whether the cellar was or was not within the contract, and as to the price of certain cupboards. He considered that one cellar only had been intended, as set out in clauses 3, 6, 19, 23, 35, and 51 of the specification. It was clearly specified, but not shown on original drawings. The additional cellar under parlour was neither shown nor specified. On the contrary, sections 3, 23, 35, and 51 pointed clearly to the intention to provide one cellar only, and that one under the kitchen. And clauses 6 and 9 referred to "cellar" in the singular, and not in the plural number. A written order to provide an extra cellar had been signed by the defendant. Mr. Evans admitted he had given a verbal order for the two cupboards. He (Mr. Parker) estimated the value of the cellar under the parlour at 26*l.* 6*s.* 6*d.*, and that the plaintiff was also entitled to 5*l.* 5*s.* 7*d.* for the cupboards. It was pointed out that Mr. Parker's award was 6*s.* 2*d.* more than the amount claimed in the one instance and 2*d.* less than the other. In reply to His Honour, Mr. Parker said he had no knowledge of the case or communication with the parties.

Defendant's solicitor said the work had not been done as he had wished, and he was now saddled with a debt of something like 300*l.* The work ought also to have been done in the specified time, and Mr. Welsh had agreed to forfeit 2*l.* a week for any time he was over the time, which he had not done. Defendant had paid 250*l.*, and still been kept out of the house. Mr. Willett, the architect, had retained the drawings, refused to give them up, and had, he understood, actually given them up to Mr. Welsh. So that the defendant had been kept in the dark, and had had nothing to show what he owed.—Plaintiff's solicitor said the defendant had had everything made clear to him, and the only excuse that he had had for not paying was that he was short of money. The statement about the drawings was incorrect. There were two sets of drawings, as there should be, the working set given to Mr. Welsh, the builder, and the other set retained by Mr. Willett to see that the work was properly carried out, and those drawings had never been out of his hands.—Defendant said that Mr. Willett employed Mr. Welsh. The first agreement was for 214*l.*, and then it was found there was only one cellar.—His Honour said that if defendant had displayed any ignorance, it really did not affect this matter. Plaintiff had claimed less than Mr. Parker had allowed, showing that defendant had already paid something on account of these extras. Judgment was for 23*l.* 5*s.* 4*d.*, the amount claimed, and usual costs.

The action was next heard which was brought against Mr. Willett, the architect, by Mr. Evans, for 5*l.*, special damages caused by detention of the specifications, plans, and drawings, and 4*l.*, their value. Also an action brought by Mr. Willett against Mr. Evans for 14*l.* 3*s.* 6*d.*, being 12 guineas, 5 per cent. on the 252*l.* for which the cottage had been built, 10*s.* 6*d.* for preparing agreement, and a guinea for preparing copy of drawings for the Corporation, less the value of some potatoes on the land where the house was built. Mr. Willett, who conducted his own case, said he had given Mr. Corner and his client every opportunity to come to his office and examine the plans, and he had once taken the plans to Mr. Corner's office for him to see.—His Honour: It is quite clear that the plans are the property of the person who employs you.—Mr. Willett: Yes, but I am answerable for the drawings until the work is settled for between the parties. Suppose Mr. Corner had destroyed them after I had given them up to him.—Mr. Corner: He is our servant.—Mr. Boycott pointed out that at the bottom of the specifications was a clause that the architect's decision in all points of dispute should be binding and final on all parties.—Mr. Corner argued that the clause was inoperative because it was not signed.—Mr. Willett said it was only the agreement that was usually signed, and that was signed in this case.—Mr. Evans, examined, said that Mr. Willett agreed to receive 5*l.* for his share of the work, and the work was to be done for 100*l.*; he had never agreed to pay him 5 per cent. When the house was put up there was no stairs, and when they were put up they were only 4 feet 6 inches high; and was present at Mr. Corner's office when Mr. Willett demanded 17 guineas for the plans. Mr. Willett refused to accept the 17 guineas when it was offered to him.—Cross-examined by Mr. Willett, Mr. Evans said they first talked about building two houses for 300*l.*; Mr. Pantall took them both up to the place.—Mr. Willett said the reason he declined to give up the



drawings was because he considered he should have done wrong to let them out of his custody until the matter was settled, and he took legal advice of Mr. Knight, solicitor, upon the point.—His Honour said it was quite clear Mr. Willett was entitled to his 12 guineas, which he believed was the usual fee of 5 per cent. for builder's work. He was also entitled to keep those plans until the account was paid up. His Honour also drew attention to the clause as to the architect's decision in all points of dispute, and said it seemed to him that the architect could not decide if he gave up the drawings. Judgment was therefore for Mr. Willett for the amount claimed, and Mr. Evans was non-suited in his action.—Mr. Welsh asked to be allowed to say a word, in exculpation of himself and Mr. Willett, about these stairs.—His Honour said he could not allow it. It was not necessary.

## CHURCH BUILDING AND RESTORATION.

**Aberaman, South Wales.**—This church, which is situated near Aberdare, and has been erected at the sole cost of Sir George Elliot, Bart., M.P., as a memorial to Lady Elliot, and for the benefit of his employes (about 400 of whom it will accommodate), was opened by the Bishop of Llandaff on Saturday last, the 29th ult. It consists of nave, 63 feet by 28 feet, with north porch, 9 feet square; chancel (with semicircular apsidal ends) 35 feet by 22 feet; and two transepts, each 14½ feet square. The sloping character of the site has been utilised so as to provide three useful rooms beneath the chancel and transepts, these floors being supported on iron girders and white brick arches. The general style of architecture adopted is the one that prevailed during the fourteenth century. The pitch pine nave and transept roofs are open to the ridge, and plastered beneath the rafters, and the chancel has a waggon-boarded ceiling. The coping and other dressed stone came from Messrs. Pictor's Westwood Quarry, and the carving in imitation of natural foliage and fruit has been executed by Mr. G. F. Herridge, of Cardiff. The pitch-pine seats in the nave are of the usual open description, and the chancel-stalls, reading-desk, lectern, communion table, and pulpit are in carved pitch pine, the latter resting on a Bath stone corbelled base, the font being in similar stone, its circular bowl being supported on four small detached columns. The wide passage up the centre of the church is laid with wood blocks in patterns, with an ornamental encaustic, glazed zigzag tile bordering, while the chancel and sacarium have Maw's encaustic tiles. The wrought-iron and brass work, including all the gas fittings, came from Messrs. Brawn's Birmingham Art Metal Works. The heating is by means of hot-water piping, carried along the walls and passages. The glazing of the windows, supplied by Ben. Gay, of Bristol, is cathedral rolled in variegated tints, but the glass in the chancel lancets is by Mayer, of Munich. Mr. C. Shepherd, of Cardiff, was the contractor, and the architect, Mr. E. H. Lingen Barker, of London and Hereford.

**Bolton.**—A new vicarage is shortly to be built for the parish of St. Mark's, Bolton, from designs by Mr. Marshall Robinson, architect, 19 Acresfield, Bolton. The character of the building is to be Early English, and the cost about 2,000*l*.

**Edinburgh.**—The new Greyfriars church improvements having been completed, the building has been reopened. The works have been carried out by Messrs. G. Beattie & Son, under the superintendence of Messrs. Hardy & Wight, architects, at a cost of 780*l*.

**Glasgow.**—The copestone of the new spire of Camphill United Presbyterian church was laid on Saturday last. The spire is about 200 feet high. It was included in the original plans when the church was built in 1875-76, but for various reasons has not been erected till now. Besides the church and spire, the plans, as now carried out in their entirety, include a large hall, and the total cost of the buildings has been a little over 17,500*l*. An illustration of the church has appeared in *The Architect*. The works have been carried out by Messrs. Morrison & Mason, under the direction of the architect, Mr. William Leiper, F.R.I.B.A.

**Loanhead, N.B.**—A new Established church has been erected in the Loanhead district. It is designed in Gothic of the Early Decorated period. The plan is laid out with transepts, of shallow depth, which can be used for future extension, and the interior with an end gallery which accommodates 500 sitters. An octagonal vestry is added near to the west transept, and the hall, constructed of larger size than an ordinary session chamber, is placed behind the church. Messrs. Hardy & Wright, Edinburgh, are the architects.

**Northampton.**—The church of St. Katherine has been reopened after alteration and repairs. The works have been carried out by Mr. E. H. Jackson, contractor, Horsemarket, Northampton, under the direction of Messrs. Ingman & Sons, architects, Northampton. The colouring has been executed by Mr. Banks, of Abington Street, Northampton.

**Nottingham.**—A new Roman Catholic church, dedicated to Our Lady and St. Patrick, has been opened. The style is Early

English of the Lancet period, the materials red brick with stone dressings, and the plan includes nave and two aisles, with sacristy and vestries for the priests and choir. The nave is 70 feet by 25 feet, and 60 feet high to the ridge, and the aisles are 66 feet by 13 feet. There is a gallery at the east end for the accommodation of the organ and choir, and the church, including gallery, will accommodate about 600 people. The altar and reredos are of carved oak. In the panels of the reredos are figures of Our Lady, St. Patrick, St. Joseph, and St. George, the whole surmounted by a carved canopy decorated with the figures of angels. The benches are open, and the church is paved with red quarries. The contractor is Mr. Henry Vickers, and his sub-contractor, Mr. Raworth, has fitted up the heating apparatus. The gas-fittings have been provided by Mr. Rhodes. Messrs. Farmer & Brindley, of Westminster Road, London, executed the reredos and altar, and Messrs. Burlison & Grylls, of Newman Street, London, are the painters of the panels. Mr. Robert Speed was the clerk of works, and the architects were Messrs. Evans & Jolley, of Nottingham.

**Orwell.**—The noble chancel of Orwell parish church, Cambridgeshire, has been reopened after repair. The fabric of fifteenth-century date was in an almost critical state from the decay of the roof, and spreading of walls. The roof has been reinstated in oak, only a few small portions of the old material being available for the purpose. Some of the old oak-boarded ceiling remained behind the later boarding, and has been made good with its traceried cusped ribs. At the intersections of the ribs was an interesting series of shields, painted in distemper, with the coats of arms of many of the principal county families, but almost obliterated. A faithful record of these had been preserved in a manuscript history of Cambridgeshire, preserved at Wimpole Hall; and from this, by the aid of the few traces still remaining on the shields, they have been recoloured. The work has been carried out under the direction of Mr. William White, F.S.A., 30A Wimpole Street, W.

**Rochdale.**—Steps are to be taken for the restoration and improvement of the parish church, Rochdale, plans for which have been prepared by Mr. J. S. Crowther, architect, of Manchester. They embrace a ground plan of the chancel and elevations showing the east wall and south side of the church. On the south side a clerestory is shown from the eastern end of the nave, extending from the east arch to the wall of the sacarium. It is proposed to extend the chancel aisle by two lights on the exterior. The south chancel aisles and the Trinity Chapel will remain undisturbed. The elevation of the north is of similar design. The longitudinal section shows three new arches with fluted columns on both the north and south sides of the interior. It is proposed also to replace the present roof of the church with a double hammer-beamed roof of the Perpendicular period.

**South Molton.**—A Wesleyan chapel, lately erected, has been opened. The building is of local stone, with Douling and Ham Hill stone dressings. The interior is arranged to seat about 350 people. A vestry and school-room, with large class-rooms, are provided at the back. The contractors were Messrs. Sanders & Son, Mr. Comins doing the plumbing, glazing, and gas-fitting, and the decoration of the organ. The architect was Mr. A. Lauder, of Barnstaple.

**Wotton-under-Edge.**—The chancel of the church at Wotton-under-Edge, which has been remodelled and restored, has been reopened. The east window, which was blocked up for a considerable distance by stone work, has been restored and filled with stained glass of rich design, the gift of the Rev. W. Cooper, rector of Frettenham, Norwich, in memory of Dr. John Cooper and others. The new choir and clergy stalls are of English oak. The carving has been executed by Mr. Frith, of Gloucester. The work of restoration has been carried out under the direction of Messrs. Waller, Son & Wood, the diocesan architects, Gloucester.

## SCHOOL BUILDINGS.

**Claughton.**—St. Michael's Schools, Christchurch, Claughton, lately erected, have been opened. Accommodation has been provided for 976 children, the whole of the class-rooms being on one floor. A tower and spire rise near the organ-chamber to a height of 70 feet above the roadway. There is a covered playground for the children. The cost has been about 4,200*l*. The architect was Mr. A. Bleakley, of Birkenhead and London, and the contractors were Messrs. Bleakley & Son, Birkenhead. The heating and lighting were carried out by Messrs. Barratt & Russell, Leeds, and the lead-light glazing by Messrs. J. A. Forrest & Son, Liverpool.

**Mexborough.**—The new Board school in Garden Street Mexborough, built to accommodate 287 boys and girls, has been formally opened by the chairman of the board. The school adjoins the infants' school. A large schoolroom is arranged fronting Garden Street, 77 feet 6 inches by 20 feet wide. There are three class-rooms. The work has been satisfactorily completed by Mr. F. Newsum, of Mexborough. The plans were prepared



and the works carried out under the direction of Mr. H. L. Tacon, architect and surveyor, of Rotherham. The total cost, including furnishing and fittings, is £1,344 17s.

**Warrington.**—The foundation-stone of new schools for Sunday and day purposes has been laid. The building will be of brick, with pressed brick and stone dressings. Two kinds of stone will be used in the dressings, namely, that from the Rainhill quarries and Ringley, which is a costly light yellow, procured from quarries near Halifax in Yorkshire. The internal joinery work will be pitch pine, stained and varnished. Including the furnishing, the cost will be about 2,000£. Messrs. Wm. Gibson & Son, builders, Church Street, Warrington, are the sole contractors, with Mr. Edward Gettins, stone-mason, Orford Street, as sub-contractor. Mr. Owen is the architect.

### NEW BUILDINGS.

**Goole.**—The foundation-stone of a sailor's institute at Goole has just been laid. The piece of land on which the new institute will stand has a frontage of 54 feet, and is 100 feet from front to back, containing 600 square yards or thereabouts. The plans of the building were prepared by Mr. W. A. Gelder, of Hull, and were selected in a limited competition. The contract is being carried out by Messrs. Jackson Bros., Goole. The style of the building is Tudor, to be built in red stocks, with stone dressings. The elevation is broken up so as to form a tower at the west angle of the façade. The main central entrance is approached by steps, owing to the north side of North Street being low. The vestibule is 8 feet by 5 feet, entering to a corridor 4 feet 6 inches wide. The accommodation is as follows: Ground floor—library, or committee-room, reading-room, recreation-room, kitchen, cloak-room, with a room to hold 100 persons. The mission hall is on the first floor, and is reached by a main staircase 4 feet wide, landing on the vestibule at each side; also a private staircase 3 feet wide. It is lighted on all sides. The roof is open, with dressed timber. A large platform is provided, also tea table closets at the side. It will accommodate 350 persons, and is to be heated by one heating apparatus. The scullery and heating vaults are approached by subway.

**Harrogate.**—A cottage hospital, erected in Victoria Park, has been opened. The hospital is arranged on the pavilion system, the main wards being placed so as to be nearly isolated from the main block, in order that light and air may enter from all sides. In point of dimensions, the building has somewhat overstepped the lines of a "cottage" hospital. The principal entrance is placed in the centre of the administrative portion, giving access to the hall and wards and to the out-offices, which are carefully isolated from the main building by ventilated lobbies. The staircase is also placed in a central position, so as to be easily and conveniently worked. It is estimated that the total cost of the building, furnishing, enclosure walls, palisades, gates, and site will be over 5,000£. Mr. John Adams, of Harrogate, is the architect.

**Manchester.**—Plans have been prepared by Messrs. Pennington & Bridgen, architects, for the erection of a new Royal Eye Hospital. The building is to accommodate 100 in-patients, and will have arrangements for 400 out-patients. The administration will contain suites of apartments for the resident medical officers and matron, board-room, secretary's room, and rooms for medical staff, with spacious dining-hall. The out-patients' department has a waiting-hall, registration-hall, examination rooms, and a dispensary. Wards, on the pavilion principle, will accommodate sixty males and forty females, with all the requisite nurses' rooms, baths, &c. Isolated wards are provided for infectious cases, and spacious day-rooms arranged contiguous to the wards, with airing ports available in fine weather. The building has been designed in a simple style of free Classic. The structure will consist of red brick with red-tiled roof, and sash windows with transoms and movable fanlights. Toned glass will be adopted in all the rooms used by the patients.

**Public Halls, Stirling.**—The new building in Albert Place has been opened. It contains two halls, a large hall and a lesser one, which have independent entrances, and can be used simultaneously without in any way interfering with the proceedings in either. The large hall is seated for about 1,300, and the small one for about 300. Both are well lighted, and the floors have been laid with polished pitch pine for dancing. The heating and ventilating are on the same system as that which has been successfully applied in the fine St. Andrew's Halls in Glasgow, a water-engine pumping hot or cold air into the halls as required, and having ample power to keep the temperature to any degree wanted. The means of exit are so numerous that it is calculated the large hall could be cleared within eight minutes. The hall, having corridors on three sides, will be free from draughts, and no effort has been spared to make it comfortable as well as safe. The large hall is adapted for a theatre. The scenery can be taken up to the flies, and the stage ceiling closed, so that no appearance of theatricals will be visible when the hall is used for other purposes.

The back of the platform has been specially constructed for the reception of the organ now being built by Mr. Willis, of London. The building was erected from plans by Mr. W. Simpson, junr., architect, Stirling.

### ARCHÆOLOGY.

**Late Excavations in Egypt.**—The excavations made by M. Maspero during last summer in Egypt were as follows: He began to clear the great Temple of Luxor from the buildings erected within its precincts. In the court of the temple there were from forty to forty-five houses and a mosque. About twenty-seven of these houses are now removed, and a large part of the temple walls are laid bare. In Carnak the doorposts of the Temple of Horns have been excavated, and it has been found that the temple was built of the material of an older one, ascribed to Amenopsis IV. On the stones is engraved the list of the northern nations conquered by Armais. On the left bank of the Nile excavations have been commenced at Deir-el-Bahari, with a view to finding graves of the old kingdom. The tomb of Horoptn and the Queen Tmou have been found, and sent to Bulak. On this occasion not only long inscriptions (some of them more than two hundred lines) have been discovered, but also graves built of brick, with regular vaults. Until now it was believed that the arch was unknown to the more ancient Egyptians.

### GENERAL.

**Mr. E. C. Robins, F.S.A.**, has been elected an honorary member of the Association of Public Sanitary Inspectors.

**The Receipts** of the Loan Exhibition of Historic Portraits and other Paintings, which closed in Edinburgh on Saturday last, amount to 1,500£, and are more than sufficient to cover the expenditure.

**Mr. John Wallace** read a paper on "Modern Work in Glasgow," at the meeting of the Glasgow Architectural Association which was held on Tuesday.

**The Durham Architectural Society** paid a visit last week to Redmarshall and Sedgfield, in the parish churches of which the old wood-carvings, brasses, monumental figures, &c., were inspected with interest.

**A Reredos**, designed by Mr. E. Law, of Northampton, has been erected in the church of St. Giles in that town. The reredos is of Caen stone with alabaster and coloured marble, the style being early fourteenth century.

**A Pier**, estimated to cost 20,000£, is to be constructed at Ventnor.

**Mr. L. M. Fitzgerald**, of Lismore, has obtained the prize of 50£, offered by Mr. Villiers Stuart, M.P., for a design for a labourer's cottage.

**The Birmingham Town Council** on Tuesday referred a proposal to erect assize courts at a cost of 80,000£ to the General Purposes Committee, which has power to approach the Government on the question.

**Messrs. Padbury**, of Scarborough, have taken the contract for the restoration of the chancel of Hemingbrough church, near Howden, under the direction of Mr. Ewan Christian.

**Peterborough Cathedral.**—The whole of the condemned portion of Peterborough Cathedral having been demolished, the foundation-stone of one of the new piers was laid on September 28 in concrete on solid rock. It is feared the two western piers will also be condemned, as the old foundations were laid in loose earth four feet above the rock.

**The Foundation-stone** of the new Sheriff Court House buildings, the erection of which is estimated to cost about 15,000£, was laid on Saturday last at Paisley. The architects are Messrs. Clark & Bell, of Glasgow.

**The Tees Conservancy Commissioners** have recovered from the river, in the course of dredging works, 134 heavy trees, varying from 10 to 40 feet in length, which probably belonged to the forest existing in the locality in remote times.

**The Vestry Hall of St. James's**, Westminster, in Piccadilly, has just undergone complete redecoration by Messrs. M. & W. Fleming, of 4 Pall Mall Place, S.W., from the designs and under the superintendence of Mr. Bernard Dicksee and Mr. Arthur Dicksee, the partners in the firm.

**A Carved Pulpit** has been erected in Pelsall church, near Walsall, by Messrs. Jones & Willis. It is of Caen stone, with marble columns.

**The National Smoke Abatement Institution** has received 100£ from the Gas Light and Coke Company, and 100£ from the South Metropolitan Gas Company.

**Messrs. Robert Boyle & Son**, of 64 Holborn Viaduct and Glasgow, have been adjudged for their patent self-acting air-pump ventilators the first prize (silver medal) by the Mining Institute of Cornwall at their conference recently held at Redruth. The firm has also been awarded the first prize medal at the Cork Exhibition, where their system is used for the ventilation of the exhibition buildings.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, OCTOBER 6, 1883.

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 160 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. David Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

### CONTRACTS OPEN.

**BALROTHERY.**—Oct. 8.—For Supplying and Fixing Cart Weighbridge. Mr. J. Stack, Board-room, Workhouse, Lusk, Co. Dublin.

**BARRONY.**—Oct. 11.—For Supplying and Laying Fire-clay Pipes (550 yards). Mr. W. R. Copland, C.E., 146 West Regent Street Glasgow.

**BEDFORD.**—Oct. 9.—For Building Stables. The Borough Surveyor, Corn Exchange, Bedford.

**BRADFORD.**—Oct. 13.—For Extension of Boys' and Girls' Departments, Lilycroft School. Mr. T. C. Hope, Architect, 27 Kirkgate, Bradford.

**CANVEY ISLAND.**—For Raising and Repairing Sea Wall (250 rods). Messrs. Bridges, Walton & Bridges, 20 Hart Street, Bloomsbury Square, W.C.

**COLCHESTER.**—Oct. 9.—For Building Class-rooms, Day-rooms, Dormitories, Lavatories, W.C.'s, &c., Eastern Counties Asylum for Idiots. Mr. W. R. F. Vallance, Architect, White Hart Chambers, Mansfield.

**COLWYN BAY.**—For Building Two Detached Villas. Mr. Lawrence Booth, Architect, 88 King Street, Manchester.

**CROYDON.**—Oct. 16.—For Widening Two Bridges over Railway. The Borough Engineer, 8 Katherine Street, Croydon.

**DEWSBURY.**—Oct. 8.—For Entrance and Covered Way to Industrial Hall. Mr. Henry Holtom, Architect, Bond Street, Dewsbury.

**DREWSTEINGTON.**—Oct. 8.—For Rebuilding Winscombe Farmhouse. Mr. E. H. Harbottle, Architect, County Chambers, Exeter.

**FENTON.**—Oct. 15.—For Works and Apparatus for Gas-works. Messrs. Stevenson & Son, C.E., 38 Parliament Street, Westminster.

**GLASGOW.**—Oct. 8.—For Forming Main Public Sewer, Camlachie Burn. Mr. John Carrick, Master of Works, City Chambers, 74 Hutcheson Street, Glasgow.

**GLASGOW.**—Oct. 11.—For Iron Tanks and Discharge Pipes for Baths and Washhouses. Mr. John Carrick, Master of Works, Glasgow.

**GUISELEY.**—Oct. 13.—For Building Two Houses. Mr. Harry May, Architect, 1 East Parade, Leeds.

**HOMERTON.**—Oct. 12.—For Additions and Alterations to Premises, 60 Brooksby Walk. The Secretary, Clapton Park Club and Institute, 60 Brooksby Walk, Homerton, E.

**HOMERTON.**—Oct. 12.—For Erection of Manufactories, Offices, &c., Marsh Hill. Mr. George Blyton, Architect, 16 The Hawthorn, Church End, Finchley, N.

**HORNBY.**—Oct. 9.—For Two-inch Cast Iron Pipes (112 yards). Mr. R. Stephenson, Clerk to the Guardians of Lunesdale Union, Hornby.

**ILKLEY.**—Oct. 31.—For Building Hydropathic Establishment. Mr. William Bakewell, Architect, 33 Park Square, Leeds.

**KENSINGTON.**—Oct. 18.—For Fire Extinction Appliances and Alterations to Gas and Water Services at the Workhouse and Infirmary. Messrs. A. & C. Harston, Architects, 15 Leadenhall Street, E.C.

**KERACHIA, INDIA.**—Oct. 29.—For Cast-iron Pipes, Valves, Hydrants, &c. Messrs. F. P. Baker & Co., 6 Bond Court, Walbrook.

**KINGSBRIDGE.**—Oct. 13.—For Restoration of Dodbrooke Church. Mr. John D. Sedding, Architect, 18 Charlotte Street, Bedford Square, W.C.

**LIVERPOOL.**—Oct. 9.—For Making a Goods Depôt. Plans at the Engineer's Office, Hunt's Bank, Manchester.

**LLANELLY.**—Oct. 6.—For Supplying and Laying 5,000 yards of Stoneware Drainage Pipes, and Construction of necessary Branches, Street Gullies, Manholes, Ventilators, &c. Mr. Geo. Watkeys, Surveyor, Town Hall, Llanelli.

**LLANISHEN.**—Oct. 12.—For Construction of Large Storage Reservoir, including Embankments, Valve-well, Culverts, Gauge-basins, Overflow, By-channel, Road, Fencing, and other works.—Mr. J. A. B. Williams, Engineer, Queen's Chambers, Queen Street, Cardiff.

**LONDON.**—Oct. 9.—For Conversion of Nos. 12 and 13 Bath Street, E.C., for the Postal Telegraph Staff. H.M.'s Office of Works, 12 Whitehall Place, S.W.

**LLECHRYD.**—Oct. 12.—For Building Residence. Mr. George Morgan, Architect, 24 King Street, Carmarthen.

**MANCHESTER.**—Oct. 11.—For Iron and other Work for Foot Bridge at Casual Wards. Messrs. Wills & Murgatroyd, Architects, 23 Strutt Street, Manchester.

**MANNINGHAM.**—Oct. 11.—For Building Four Terrace Houses. Messrs. Fairbank & Wall, Architects, 155 Swan Arcade, Bradford.

**MIDDLESBROUGH.**—Oct. 6.—For the Construction of a Reservoir to hold about 500,000 gallons, with the necessary Pipe Connections, Valves, Overflows, Washouts, &c. Mr. J. Mansergh, C.E., 3 Westminster Chambers, Victoria Street, S.W.

**MIDDLESBROUGH.**—Oct. 17.—For Enlargement of Dock, comprising Construction of Quay Walls, Timber Wharf, Entrance Lock, &c. Engineer-in-Chief's Office, North-Eastern Railway, Newcastle-on-Tyne.

**NEWARK.**—Oct. 9.—For Alterations to Tenements, Ridley's Yard. Mr. G. Sheppard, Borough Surveyor, 9 Kirkgate, Newark.

**NEW WORTLEY.**—Oct. 6.—For Works in Building Six Houses and Three Shops. Mr. F. W. Rhodes, Architect, Upper Wortley.

**NORTH LEW.**—Oct. 6.—For Restoration of Parish Church. Mr. R. Medley Fulford, Architect, The Close, Exeter.

**NOTTINGHAM.**—Oct. 22.—For Building Additional Court Room and other Works at the County Court. Drawings, &c., at the County Court, Nottingham.

**OBAN.**—Oct. 6.—For Erection of Block of Buildings in Argyll Square. Messrs. Ross & Mackintosh, Architects, George Street, Oban.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**ROTHERHAM.**—Oct. 13.—For Additions and Alterations to Blenheim House. Mr. H. L. Tacon, Architect, 11 Westgate, Rotherham.

**SHEPPEY.**—Oct. 9.—For Works of Addition at the Workhouse. Mr. John Copland, Clerk to the Guardians of Sheppey Union, Sheerness.

**SILSDEN.**—Oct. 13.—For Building Mechanics' Institute. Mr. J. B. Bailey, Architect, North Street, Keighley.

**STAINLAND.**—Oct. 6.—For Heating Apparatus, &c., for Chapel. Mr. T. L. Patchett, Architect, George Street Chambers, Halifax.

**STOKE-ON-TRENT.**—Oct. 15.—For Warming Smallwood Church with Hot Air. The Incumbent, Smallwood Church, near Scholar Green, Stoke-on-Trent.

**STOURBRIDGE.**—Oct. 8.—For Works of Sewerage. Mr. Harry Mills, Clerk to the Board, 118 High Street, Stourbridge.

**STURTON-BY-STOW.**—Oct. 10.—For Building Small Farmstead. Messrs. Watkins & Scorer, Architects, St. Edmond's Chambers, Silver Street, Lincoln.

**SUNDERLAND.**—Oct. 8.—For Building Cottage and Stables, Castletown Vicarage. Messrs. J. & T. Tiltman, Architects, 5 Bridge Street, Sunderland.

**SWANSEA.**—Oct. 9.—For Schoolroom, Class-rooms, &c. Messrs. E. Roberts & Son, 40 Oxford Street, Swansea.

**SWINFORD.**—Oct. 9.—For Two Corrugated Iron Sheds. Mr. P. J. McNulty, Clerk to the Swinford Union, Ireland.

**SYDENHAM, CO. DOWN.**—Oct. 13.—For Building Schoolhouse. Mr. W. J. Fennell, Architect, 11 Chichester Street, Belfast.

**WAKEFIELD.**—Oct. 9.—For Building Detached Villa Residence. Mr. G. H. France, Town Hall Chambers, King Street, Wakefield.

**WIMBLEDON.**—Oct. 9.—For Construction of Girder Bridge, with Concrete Abutments, over the Wandle. Mr. W. H. Whitfield, Local Board Office, Broadway, South Wimbledon.



WORKINGTON.—Oct. 8.—For Building House, &c. Mr. John Warwick, Clerk to the Local Board, Workington.

WYLLAM-ON-TYNE.—Oct. 6.—For Enlarging Chapel, West Wyllam. Mr. T. Southron, Architect, 70 King Street, South Shields.

## TENDERS.

## ABERDEEN.

For Stable Offices to House, No. 1 Rubislaw Terrace, Aberdeen, for Mr. John Davidson, Munglenross. Messrs. Ellis & Wilson, Architects. Quantities by the Architects.

Fordyce & Co., mason	£119 0 0
Smith & Tormie, carpenter	180 0 0
Wilson, slater	19 2 0
Bannochie, plasterer	32 1 0
Robertson, plumber and gasfitter	21 10 0
Ferguson & Co., painter and glazier	12 10 0

## BANGOR.

For Erection of Shops and Dwelling-houses in Main and West Streets, Bangor, Ireland. Mr. J. Boyd, Architect, Belfast.

Gabbey, Belfast	£1,617 0 0
Magnire, Bangor	1,583 16 7
Mansell, Belfast	1,477 0 0
Thompson, Belfast	1,240 0 0
COLVILLE, Bangor (accepted)	1,200 0 0

For Craig-Y-Don Drainage Works, Bangor. Mr. JOHN GILL, Engineer.

Griffith & Thomas, Bethesda	£1,936 6 0
Foulkes, Williams & Co., Corwen	1,749 15 7
Bugbird, Carnarvon	1,736 11 0
Cornburn, Hindley	1,610 18 0
WILLIAMS, Bangor (accepted)	1,600 0 0
Matthews, Stockport	1,584 17 10
Evans Bros., Wolverhampton	1,544 13 3
Engineer's estimate	1,675 10 0

## BELFAST.

For Erection of New Orange Hall, Clifton Street, Belfast. Mr. W. BATT, jun., Architect.

H. & J. Martin	£5,390 0 0
W. Kerr	5,386 0 0
Henry	5,300 0 0
Lowry & Son	5,000 0 0
Fulton	5,000 0 0
Croft	4,986 0 0
Corry	4,920 0 0
DIXON & Co. (accepted)	4,888 0 0
Smith	4,850 0 0
W. J. Kerr	4,845 0 0

## BRIGHTON.

For Extension of Concrete Groynes and Storm-Water Outfalls, opposite the Old Steine and East Street, Brighton. Mr. P. C. Lockwood, Borough Surveyor.

Hudson, Hearley & Co., Brighton	£16,900 0 0
Dickinson, Bournemouth	16,800 0 0
Hill & Co., Westminster	15,950 0 0
Marshall, College Road	13,477 0 0
Botterill, Cannon Street, London	13,228 0 0
Cheesman & Co., Brighton	12,980 0 0
Harrison, Springfield Road	12,054 0 0

## CHESTERTON.

For Pair of Semi-detached Villas, Chesterton. Mr. H. G. BISHOP, Architect, Cambridge.

Pate, Cambridge	£2,390 0 0
Yarrow, Cambridge	2,145 0 0
Pamphilon, Cambridge	1,844 0 0
Parcell, Cambridge	1,740 0 0

## CRAMLINGTON.

For Building Twelve Houses at Cramlington for the Cramlington District Co-operative Society, Limited.

## Entire Works.

Grey	£2,982 10 0
Fortune	2,584 0 0
Haswell & Waugh	2,400 0 0
Wake	2,400 0 0
Lilburn	2,311 0 0
Spoor	2,041 0 0

## Joiner Work.

Swan	870 0 0
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## Accepted Tenders.

Gardener & Dixon, mason and bricklayer	1,450 0 0
Simmonds & Sons, joiner, painter, &c.	900 0 0

## DUNDEE.

For Construction of Relief Reservoir, &c., in connection with the Dundee Waterworks. Mr. JAMES WATSON, C.E., Engineer. Quantities by the Engineer.

## Accepted Tenders.

Excavator works, Anderson, Dundee	£1,073 16 8
Cast-iron Pipes, 27 in. diameter, Cochran, Grove & Co., Middlesbrough	709 0 0
Sluice Valves Gearing, Glenfield Co., Kilmarnock	107 5 0
Screening Apparatus, Beath & Keay, Dundee	35 0 0
Pipe Laying and Jointing, by Company's own Workmen	60 0 0
Fence and Gate, by Company's own Workmen	25 0 0
Land and Way-leave	75 0 0
Total	£2,085 1 8

The Engineer's protecting estimate was £2,300. The £6 for Laying and Jointing Pipes as only an estimated cost.

## COCKERMOUTH.

For Sewerage of Tallentire, Cockermouth.

3-inch Pipes.	
Fisher & Kirk, Cockermouth	£209 17 0
Jackson, Penrith	203 7 5
4-inch Pipes.	
Fisher & Kirk	232 2 0
Jackson	213 7 5

## KENNINGHALL.

For Rebuilding Wing and Alterations to the Guiltercross Union Workhouse, Kenninghall. Mr. EDWARD BOARDMAN, F.R.I.B.A., Architect, Norwich.

A. Mallett	£454 18 6
Goddard	450 0 0
Newson	425 14 5
J. Mallett	418 2 6
Whiting & Co.	390 0 0
Ludkins & Son	369 10 0

## LONDON.

For the Erection of Stabling at South Lambeth, for Mr. Geo. Cox. Mr. CHARLES JONES, Architect, 151 Ebury Street, S.W. Quantities by Messrs. Beesley & Williams, 5 Westminster Chambers, Victoria Street, S.W.

Coulthard	£1,300 0 0
Jackson & Todd	1,274 0 0
Gregory	1,232 0 0
Pickersgill	1,119 0 0
Heath	1,071 0 0
Williams	1,071 0 0
Scharien & Williams	1,038 0 0

For Building New Workhouse, Wandsworth and Clapham Union. Messrs. WILSON, SON, & ALDWICKLE, Architects. Quantities by Mr. C. Dowling.

Jenkins	£72,290 0 0
Chappell	68,800 0 0
Skiff	67,100 0 0
Lathey Bros.	65,300 0 0
Davis	64,000 0 0
Turtle & Appleton	63,720 0 0
Gibbs & Flew	62,726 0 0
Lucas	62,500 0 0
Mullens	62,436 0 0
Perry & Co.	62,288 0 0
Johnstone	62,168 0 0
Martin, Wells & Co.	61,720 0 0
Gabbott	60,990 0 0
Shurmur	60,840 0 0
Booth	60,750 0 0
Stevens & Bastow	60,450 0 0
Shepherd	59,920 0 0
Parsons	59,745 0 0
Peto	59,595 0 0
Croaker	59,435 0 0
Greenwood Bros.	58,847 0 0
Nightingale	57,872 0 0
Kirk & Randall	57,615 0 0
Lawrence	57,194 0 0
Wall	57,287 0 0
Gibbons	57,000 0 0
Jerrard	56,244 0 0
Foster & Dicksey	55,883 0 0
D. D. & A. Brown	55,506 0 0
Smith	53,977 0 0

For Building Cremorne School, Upcorno Road, Chelsea, for the London School Board. Mr. E. R. ROBSON, Architect.

Smith	£13,940 0 0
Langmead & Way	12,495 14 4
Thorn	12,083 17 0
Webber	11,997 0 0
Tarrant & Son	11,505 0 0
Holloway Bros.	11,482 0 0
Atherton & Latta	11,317 0 0
Higgs	11,300 0 0
Oldrey	11,246 0 0
Lathey Bros.	10,990 0 0
Shurmur	10,989 0 0
Cox	10,966 0 0
Smith & Sons	10,863 0 0
Reading	10,800 0 0
Stimpson & Co.	10,671 0 0
Kirk & Randall	10,653 0 0
Patman & Fotheringham	10,389 0 0
Niblett	10,347 0 0
Manley	10,344 0 0
Croaker	10,332 0 0
Brass	10,309 0 0
Jerrard	10,298 0 0
Scrivenner & Co.	10,273 0 0
Hart	10,272 0 0
Wall	10,224 0 0

For Building Board School, Mantle Road, Brockley. Mr. E. R. ROBSON, Architect.

Perry & Co.	£9,947 0 0
Brass	9,856 0 0
Nightingale	9,754 0 0
Sargeant	9,675 0 0
Reading	9,480 0 0
Hart	9,358 0 0
Patman & Fotheringham	9,300 0 0
Tarrant & Son	9,300 0 0
Lathey Bros.	9,254 0 0
Langmead & Way	9,220 0 0
Oliver	9,190 0 0
W. & F. Croaker	9,174 0 0
Marsland	9,105 0 0
Wall	9,089 0 0
Higgs	9,065 0 0
Grover	8,991 0 0
Shurmur	8,982 0 0
Jerrard	8,779 0 0
Kirk & Randall	8,739 0 0
Longman Bros.	8,720 18 0
Scrivenner & Co.	8,660 0 0
Stimpson & Co.	8,637 0 0
Smith & Sons	8,626 0 0
Shepherd	8,623 0 0
Atherton & Latta	8,610 0 0

## LONDON—continued.

For Building Board School, Union Street, Greenwich, Mr. E. R. ROBSON, Architect.

Perry & Co.	£8,353 0 0
Brass	8,349 0 0
Nightingale	8,165 0 0
Hart	8,083 0 0
Reading	8,067 0 0
Langmead & Way	8,023 0 0
Patman & Fotheringham	7,900 0 0
Lathey Bros.	7,889 0 0
Niblett	7,867 0 0
Croaker	7,849 0 0
Grover	7,730 0 0
Wall	7,714 0 0
Jerrard	7,593 0 0
Tongue	7,563 0 0
Higgs	7,530 0 0
Smith & Son	7,464 0 0
Manley	7,442 0 0
Atherton & Latta	7,400 0 0
Scrivenner & Co.	7,389 0 0
Tarrant & Son	7,389 0 0
Kirk & Randall	7,375 0 0
Shepherd	7,321 0 0
Longman Bros.	7,275 0 0
Johnson	7,236 0 0
Stimpson & Co.	7,103 0 0

For Twenty-four Warehouses and Six Shops in Aldersgate Street. Mr. J. LAWRIE, Architect. First block of Six Warehouses.

STONE (accepted) £5,693 0 0

For Erecting new Warehouse for Messrs. R. H. & J. Pearson, Uxbridge Street, Notting Hill. Mr. H. HART, Architect. Quantities not supplied. D. D. & A. BROWN (accepted).

For the Erection of Superstructure to Warehouse, Artillery Lane, for Mr. W. J. Bush. Messrs. HAMMACK & LAMBERT, Architects.

F. & P. J. Wood	£7,783 0 0
Ashby Bros.	7,435 0 0
Merritt & Ashby	7,337 0 0
Bangs & Co.	7,334 0 0
Johnson	7,289 0 0
Nightingale	6,993 0 0

## SHEFFIELD.

For Erection of Shops, Offices, and Works in West Street, Sheffield, for W. Hutton & Son. Messrs. WRIGHTMAN & WRIGHTMAN, Architects, Sheffield.

## Whole of the Works.

Slack, Sheffield	£17,265 0 0
Harrison, Sheffield	15,949 0 0
Tomlinson & Son, Sheffield	15,900 0 0
Brumby, Sheffield	15,870 0 0
Carr, Sheffield	15,864 0 0
Robertson, Sheffield	15,789 0 0
Fidler, Eokington	15,620 0 0
Morton, Sheffield	15,509 0 0
Garlick, Birmingham	15,500 0 0
Bisset & Sons, Sheffield	15,500 0 0
Foxton Bros., Sheffield	15,392 0 0
Ashforth, Sheffield	15,120 0 0
Alfat, Sheffield	14,940 0 0
LONGDEN & SONS, Sheffield (accepted)	14,900 0 0

## Masons.

Freckingham, Sheffield	9,914 10 6
Brumby, Sheffield	9,500 0 0
Chambers & Son	9,180 0 0
Carr, Sheffield	9,000 0 0
Morton, Sheffield	8,959 0 0
Bisset & Sons, Sheffield	8,709 0 0
Ashforth, Sheffield	8,600 0 0
Alfat, Sheffield	8,574 0 0
Longden & Sons, Sheffield	8,565 0 0
Scott, Masborough	8,260 0 0

## Joiners.

Fearn & Savage, Sheffield	3,376 0 0
Robertson, Sheffield	3,330 0 0
Holmes, Sheffield	3,773 10 0
Bisset & Sons, Sheffield	3,700 0 0
Randall, Sheffield	3,654 0 0
Anstead & Vasey, Sheffield	3,600 0 0
E. & W. Oxley, Sheffield	3,598 0 0
Chambers & Son, Sheffield	3,550 0 0
Hattersley, Sheffield	3,507 0 0
Townmow, Sheffield	3,502 0 0
Smith, Sheffield	3,500 0 0
Crooks & Son, Sheffield	3,410 0 0
Dutton & Evans, Sheffield	3,390 0 0
Wheat, Sheffield	3,090 0 0

## Plumbers.

Jones, Sheffield	1,542 0 0
Elliot, Sheffield	1,530 0 0
Bisset & Sons, Sheffield	1,520 0 0
Cullabine, Sheffield	1,450 0 0
Brookfield, Sheffield	1,453 0 0
Hickson, Sheffield	1,450 0 0
Corrie, Sheffield	1,416 0 0

## Plasterers.

Berrisford, Sheffield	690 0 0
Hodkin & Jones, Sheffield	690 0 0
Unwin & Son, Sheffield	684 0 0
F. & C. Margerrison, Sheffield	679 0 0
Chadwick, Sheffield	650 0 0
Bisset & Son, Sheffield	635 0 0

## Ironfounders.

Newton, Chambers & Co., Sheffield	720 0 0
Oxley Bros., Sheffield	692 0 0
Longden & Pickard, Sheffield	690 0 0
Robinson, Sheffield	681 18 0
Williams & Co., London	649 10 0
Carter Bros., Manchester	630 0 0
Hornan & Rodgers, Manchester	628 0 0

## Slaters.

F. & C. Margerrison, Sheffield	334 0 0
Jenkinson, Sheffield	320 5 0
Hodkin & Jones, Sheffield	316 0 0
Ellis & Wetherill, Sheffield	300 0 0
Stanforth & Lee, Sheffield	300 0 0
Chadwick, Sheffield	271 0 0



HONITON.

For the Erection of Sick Wards at the Union Workhouse, Honiton.  
Carnell, Ottery St. Mary . . . . £533 0 0

KILLYLEAGH.

For Alterations to Manse, Killyleagh, Co. Down. Mr. W. BATT, Architect, Belfast.  
Kerr, Belfast . . . . £260 0 0  
Ward, Belfast . . . . 315 0 0  
Magee, Belfast . . . . 290 0 0  
McKnight, Killyleagh . . . . 235 0 0  
McFERRAN, Bangor (accepted) . . . . 220 0 0

KING'S LYNN.

For Buildings for Stanley Library, King's Lynn. Messrs. ADAMS & SON, Architects.  
Bardell Bros. . . . £1,070 0 0  
King & Spraggs . . . . 1,064 15 0  
Wanford . . . . 1,053 0 0  
Collinson . . . . 1,038 0 0  
Dye . . . . 1,004 10 0  
BROWN (accepted) . . . . 955 10 0  
Foreman & Jarvis . . . . 955 0 0

LONG REACH.

For Erection of Laundry and other Administrative Offices, in connection with Hospital Ships *Atlas* and *Castalia*, at Long Reach, Kent. Messrs. HENRY JARVIS & SON, Architects, 29 Trinity Square, Southwark, S.E. Quantities supplied.  
Gumbrell . . . . £3,400 0 0  
Webb . . . . 3,250 0 0  
Aldridge & Jenvey . . . . 3,142 0 0  
Tyerman . . . . 3,026 0 0  
Loneragan Bros. . . . 3,010 0 0  
Wall Bros. . . . 2,937 0 0  
Cornelius . . . . 2,761 0 0  
R. & E. Evans . . . . 2,749 0 0  
Sawyer . . . . 2,723 0 0

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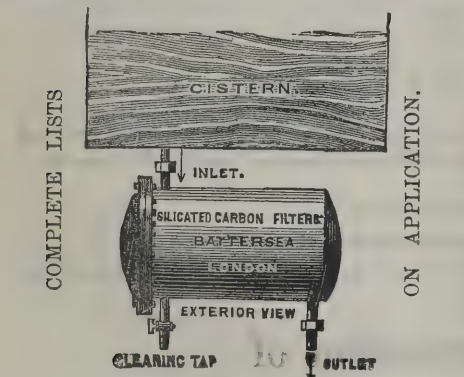
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MIDDLESBROUGH.

For Construction of Storage Tanks for the Stockton and  
Middlesbrough Water Board.  
Goodall, Middlesbrough . . . . £18,189 9 10  
Smith, Rotherham . . . . 17,806 16 2  
M'Crea & M'Farlane, Westminster  
Simpson, Barnsford . . . . 17,182 3 6  
Whitaker Bros., Stockton-on-Tees  
Fotherby & Son, Burnley . . . . 17,169 15 0  
Marshall, Darlington . . . . 16,430 5 9  
Dickson, St. Albans . . . . 16,131 17 5  
Dixon, Darlington . . . . 16,008 12 6  
Ridley, Middlesbrough . . . . 15,293 4 5  
Foster & Barry, Radcliffe-on-Trent . . . . 15,214 1 4  
Smith, Newcastle-on-Tyne . . . . 14,945 10 0  
Kellett & Bentley, Queen Victoria Street . . . . 14,722 8 0  
Johnson & Son, Middlesbrough . . . . 14,708 9 10  
Pattinson, Ruskinton . . . . 13,732 16 10  
13,121 19 0  
11,751 4 5

NEWHAVEN.

For Building Two Chapels, Lodge, Mortuary, Enclosing  
Roads, Laying Out Cemetery, &c., Newhaven. Mr.  
GEO. E. CHAPMAN, Architect.  
Rowland & Son, Eastbourne . . . . £3,190 0 0  
Peters, Horsham . . . . 2,990 0 0  
Marshall, Brighton . . . . 2,980 12 10  
Taylor, Brighton . . . . 2,892 0 0  
Woolgar, Newhaven . . . . 2,852 0 0  
Scutt, Brighton . . . . 2,850 0 0  
Morris, East Grinstead . . . . 2,775 0 0  
HALL & HONEYSETT, East Hoathly (accepted) . . . . 2,620 0 0

PONTARDAWE.

For Building School at Pontardawe, for the Llanguicke  
School Board. Mr. JOHN HAY, Architect.  
Thomas, Seven Sisters . . . . £2,010 0 0  
Davies & Co., Pontardawe . . . . 1,964 0 0  
Griffiths, Pontardawe . . . . 1,850 0 0  
REES, Estalyfera (accepted) . . . . 1,769 0 0

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RAMSGATE.

For the Erection of Auction Room, in Cliff Street, Rams-  
gate, for Messrs. R. G. Dunn & Son, Auctioneers. Mr.  
E. L. ELGAR, Architect.  
Smith & Son . . . . £1,200 0 0  
Newby Bros. . . . 739 0 0  
Miller . . . . 650 0 0  
Martin . . . . 646 10 0  
White Bros. . . . 595 0 0  
For the Erection of Dwelling-house and Shop in Cliff  
Street, Ramsgate, for Mrs. Ann Marriott. Mr. C. L.  
ELGAR, Architect.  
Brickwork and Slating only.  
Smith & Son . . . . £750 0 0  
Miller . . . . 400 0 0  
Martin . . . . 333 0 0  
Newby Bros. . . . 287 0 0  
White Bros. . . . 217 0 0

ST. ALBANS.

For Building Villa Residence, St. Peter's Park, St. Albans.  
Mr. T. FOSTER WOODMAN, Architect.  
Sparrow, St. Albans . . . . £759 0 0  
Mead, St. Albans . . . . 740 0 0  
Austin, St. Albans . . . . 739 0 0  
Pratt, Redbourne . . . . 675 0 0  
Miskin, St. Albans . . . . 647 0 0  
SAVAGE, St. Albans (accepted with modifica-  
tions) . . . . 639 0 0

WORSLEY.

For Construction of Sewer in Barlow Street, and at the  
Rears of Nos. 172 to 228 Bolton Road, Walkden, in the  
Township of Worsley, for the Barton-upon-Irwell  
Sanitary Authority. Quantities supplied by the Engi-  
neer, Mr. John Price, Assoc. M.I.C.E.  
Bird, Chorlton . . . . £93 0 0  
Oakes, Kearsley . . . . 77 16 7  
Lomax, Eccles . . . . 66 3 8  
JACKSON, Walkden (accepted) . . . . 51 10 0  
Engineer's estimate . . . . 62 0 0

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# The Architect.

## SANITARY PROGRESS.



UDGING by the noise of conflict, we should be justified in supposing that the armies of the cause of domestic sanitation are making rapid strides towards the conquest of Great Britain; and accordingly, when we look over the reports of what has been doing at the meetings of the Sanitary Congress at Glasgow which had to do with building matters, we

may reasonably expect to find some signal evidences of a general progress. But one of the chief characteristics of the advancement of the public welfare in whatever form invariably consists in the exceedingly leisurely pace at which it proceeds, and we need not be surprised after all if in the present case, as in others, the race should not seem to be to the swift. Perhaps in the end the battle may be to the strong—and to the slow.

Amongst the formal communications which were presented to the Congress in this department, there appear, however, to have been several which are of some force. For example, Dr. HUMPHREY thinks the time has come for the people of this country to require the appointment of a Minister of Sanitation; Mr. ROBINS claims a better position for inspectors of nuisances; Mr. COLES has something to say about smoke prevention, which brings out, if nothing more, a shrewd practical suggestion from Dr. CARPENTER; Mr. HONEYMAN sets forth an ingenious and novel argument—not the less likely to be sound because it was earnestly contradicted—on the question of low ceilings for rooms *versus* high ones; Professor GAIRDNER and Mr. MUIR discuss on experimental ground—that of Glasgow itself—the actual results effected by sanitary legislation; and Professor ROGER SMITH, Mr. BURDETT, and Mr. WALLACE take up in turn the state of things sanitary in London town, a subject always fertile in interest. We shall only be able on this occasion to touch upon two or three of these points.

Mr. HONEYMAN's doctrine appears at first sight to the careless reader to be something like the advocacy of low ceilings, for their own sake, as a universal rule of building; but we hope the time has not come quite yet when a member of the council of the Royal Institute of British Architects, even a provincial one, is to be found so exceedingly frank in the expression of courageous opinions. What Mr. HONEYMAN actually says is rather to this effect: that in rooms of ordinary proportions, when fully occupied, there is a certain amount of space towards the ceiling in which, as he affirms, a volume of vitiated air is kept in a stagnant condition, because of the circumstance that the atmospheric circulation within the room, so far as ordinary ventilation goes, does not require to disturb it, and in fact does not disturb it; for which reason he would prefer to see the total of cubical area distributed over a larger floor-area with a lower ceiling height. To come to particulars, let us take a room (assuming dimensions for ourselves) 14 feet square and 10 feet high, in which five poor people sleep, and compare it with a room 14 feet by 17½ feet and 8 feet high (affording the same cubical area), occupied by the same five people; then the lower and larger room is preferable, says Mr. HONEYMAN, because the air will keep in motion throughout the whole, or nearly the whole, of its height of 8 feet, whereas it will stagnate in the uppermost two feet of the ten, and so leave available for respiration in the smaller and loftier room only the smaller extent laterally with the same 8 feet vertically, the uppermost 2 feet being, in fact, waste height. Now the best way to treat this suggestion is to magnify the contrast. Let us therefore take a room, on the one hand, 10 feet square and 20 feet high (these dimensions giving the same cubical area as before), and compare it with a room, on the other hand, only 7 feet high but very nearly 17 feet square; then which of these two rooms would best accommodate the five sleepers? The rule adopted (following precedents) by the municipal authorities of Glasgow, Mr. HONEYMAN points out, would peremptorily reject the large low room and promptly accept the small lofty room; and the object which he has in view is the perfectly straight-

forward one of throwing discredit therefore upon the too mathematical and not sufficiently practical bent of the municipal mind of his native city. Of course the whole controversy must eventually turn upon the one question—What is the exact limit at which the alleged stagnation of air by superfluous height commences? Let this question be scientifically answered, and Mr. HONEYMAN begins to be in the right at that precise limit. There are many sanitarians of the blindly enthusiastic school who will simply refuse to allow the matter to be discussed, disposing of the whole affair with the dogmatic exclamation—We cannot have our rooms too high, and there's an end of it! But calmer intellects will rather invite Mr. HONEYMAN to condescend upon the facts; and what he then says is sensible enough. Poor folks, he says, want all the house accommodation they can get at the least possible expense, and this means a maximum of floor area with a minimum of sufficient height—such minimum being determinable by the simple considerations which arise out of the height of the human frame, and the height of doors, windows, and fireplaces as so many artificial agents of ventilation. Confessing, as we do, to a prejudice in favour of somewhat lofty rooms, we really cannot deny that there is here a palpable element of common sense, and we cannot blame Mr. HONEYMAN for urging his doctrine so far as it may reasonably go, as a perfectly legitimate question of progress, even if in an unexpected direction.

Dr. CARPENTER's piquant suggestion with reference to smoke abatement is one that is easily overlooked in reading the discussion that followed the paper of Mr. COLES on that important subject; but it is distinctly a new move in the way of progress. He would no longer, if we rightly understand him, authoritatively prohibit the smoke nuisance; but he would sarcastically license coal fires after the manner of a sort of state regulation of vice. "His impression was that if the Legislature gave the local authority power to license chimneys to discharge smoke into the atmosphere, and let the produce of the licenses belong to the local authority for the purpose of reducing the cost of sanitary operations in the particular district, they would soon find the smoke nuisance would be very materially abated." In this way, instead of "preventing people from having a fire to look at if they liked," he would simply make them pay for the enjoyment of it, which, he thinks, they would then speedily consent to dispense with as a costly luxury. Thus we may imagine a gentleman of pensive habits turning over in his melancholy mind during an economical fit whether to knock off the smoke of his fire or the smoke of his cigar, seeing that he could not afford both; or whether to come down to a gas stove or change his tailor, as the less irksome mode of making both ends meet. We can even imagine the wife of his bosom in the fulness of her affection offering up a sacrifice of a shilling a yard on a new silk in order to preserve for her lord "the fire he likes to look at." Indeed we might go on imagining a great many things; but we must confess that we cannot imagine any sane man in the House of Commons voting—if Dr. CARPENTER be really as serious as he seems to be—for the proposition to which he thus attaches his eminent name. Such a step in the development of sanitary wisdom is, in short, not a step in the right direction, or, so far as we can see, in any direction at all.

Mr. ROBINS, in his essay under the fragrant title of "The Disabilities of Inspectors of Nuisances," is apparently a little disabled himself by an amiable habit which he has of calling a spade something else than a spade—a trowel, perhaps, or a pickaxe, or a pound of tenpenny nails. Who are "their superior officers of health," by whom "the support they have a right to expect" is "oftentimes grudgingly given" to these examiners of our dustbins? Not the doctors, surely. Why not hit straight and from the shoulder at those ill-conditioned superiors of both doctors and inspectors, the class of self-protecting vestrymen, who are well known to procure election as public administrators for the mere purpose, amongst the rest, of preventing interference with the unsanitary condition of the "tenement property" from the farming of which they derive the shabby means of living in idleness? To do this, if Mr. ROBINS pleases, would be an act of progress indeed; for here lies the very root of the unwholesomeness of what may be called half the rotten house property in some parts of London.

Dr. HUMPHREY, as befits his position as the president of the Congress, is bold enough in his opening address to declare for "the institution of a Sanitary Department in our Legislature, distinct from the Local Government Board, and under the



direction of a Minister of Sanitary Affairs." This department would enjoy more or less control over the Registrar-General's work, the Ordnance Survey, the Geological Survey, and the business of the Meteorological Office, and "the Sanitary Institute would be a valuable handmaid," and so on. Here is another doctor as wild as Dr. CARPENTER. Such romanticism of science, may we say? does no good, and perhaps much harm by bringing into ridicule the more sober endeavours of practical men. Reticence in advocacy is, as the world goes, as important in sanitary matters as in many other things. Human nature has amongst its weaknesses a disposition to be frightened off from the most excellent reforms by exaggerated argument. Sanitary reform especially has in these days an uphill conflict to conduct, and the leaders can scarcely cultivate patience and moderation too much. At the same time, however, we do not wish to deny the too palpable fact that, in these busy and noisy days of ours, perhaps the only way in which Wisdom can make herself heard at all is to cry very loudly at the corners of the streets—indeed, perhaps, to blow her own trumpet with no uncertain sound.

### ART EXHIBITION IN DUNDEE.

LIKE its predecessors, the seventh exhibition in Dundee owes to the ready sacrifices of time and patience on the part of the organising committee the distinction which it enjoys in comparison with the exhibitions of pictures now common in most towns of any pretension. It is not, of course, a rival to Edinburgh, or nearly so. For instance, it is far less select in admitting large numbers of pictures which cannot be described as worth more than the modest prices attached to them in the printed catalogue. The committee are far too good judges to accept such productions as works of art. They are meant, apparently, to swell the number of prizes to be distributed at the close of the exhibition. Whether this is the best way to encourage art may be questioned; but it is one to keep exhibitions going. In Edinburgh, again, it is possible to meet some sudden revelation of unusual talent or genius, and it is always impossible not to find many examples of high ability on view for the first time. In Dundee there are not a few instances of very high ability; but works of the first order are not many, and of these the best have already been seen in public and become more or less familiar. It is true that they are pictures which cannot be seen too often; and there is this to be said for them also, that, though familiar to many, they are yet works of quite recent date. So that the Dundee committee cannot be charged with combining old masters and new, as is frequently the case elsewhere.

Mr. ORCHARDSON, R.A., is represented by the *Queen of Swords*, a picture very finely characteristic of his manner a year or two ago, and by *Armed Neutrality*, a good example of his present style. Both have been seen in London. *Armed Neutrality* is the picture of a boy standing stubbornly to the front, with his toy sword clasped behind his back with both hands. In the *Queen of Swords*, Mr. ORCHARDSON'S originality is displayed perhaps as well as in any work from his hands. It is an originality that amounts to a phenomenon in art, not in the ordinary sense of being striking or impressive, though it is that too in its way, but from the fertility of invention which attends the working out of his conception through all its innumerable details. It is an originality which appears to have increased and flourished under the laborious acquisition of technical skill which so effectually nips in the bud that specious originality not uncommon among young and aspiring painters. Take, for example, the subtle differentiation of character in the ladies in the *Queen of Swords* and the varied harmony of grouping in the gallants—not to speak of the tone and conception of the whole. Nature and artistic necessities are equally observed, and equally treated to justice. In his most recent work Mr. ORCHARDSON has, we think, displayed more power and breadth, and of this *Armed Neutrality* may be taken as a fair, but by no means a great example.

The owner of *The Queen of Swords* (Mr. KEILLER) is also the owner of a good work by Mr. PETTIE, R.A., *The Jester's Merry Thought*, which was in this year's exhibition of the Royal Academy. The jester lies on his back, foreshortened with all the skill and force which Mr. PETTIE loves to lavish on foreshortening. Perhaps we are wrong in saying that he has in reality any such love, since he has shown repeatedly that he can paint excellently without it. But somehow

he has produced an impression of having a favour for foreshortening in his figures. His work is always powerful in the true sense of a cumulative, not a striking, power, combined with refinement of execution and a poetic love of technical details, which has brought about a rare mastery over them. The scene with the jester is full of these qualities, with the additional charm of geniality in the conception.

In his *Portrait of Herr Joachim* Mr. JAMES ARCHER, R.S.A., has challenged a comparison with the portraits of the violinist by others who work in a different manner, as, for example, Mr. WATTS. There is no need to decide between them; there is room enough for both manners at present. But there is this to be said for Mr. ARCHER, that, though he also aims at breadth and largeness of style, it is not to the exclusion or suppression of every detail of costume that would seem to make against that effect. On the contrary, he courts such details, subduing them into perfect subordination. At least he has done so in his *Portrait of Herr Joachim*, which is indeed a very beautiful piece of work all round. He has succeeded also admirably in his *Portrait of Mrs. Stratton Tweedie*. It is one thing, however, to paint a lady whose natural appearance and dress lend themselves favourably to Mr. ARCHER'S manner, and to paint Herr JOACHIM in the completeness and simplicity of his aspect; but it is quite another thing to paint the portrait of a deceased nobleman (the late Lord KINNAIRD) from such materials as were at hand, and to paint it in the usual form of a presentation portrait. Mr. ARCHER should have seen Lord KINNAIRD busy in his great farming operations, and should have painted him in the dress he used to wear then. As it is, he has not been able to subdue the commonplace costume into artistic subordination. Still it is a work which no doubt will be welcome to the people of Dundee, to whom Lord KINNAIRD was probably more familiar in the aspect in which he is here painted. Mr. ARCHER contributes also a large landscape, the *Moor under Ben Vrachie*, true to the sentiment of loneliness which the high moors convey, to those at least who do not visit them for sport, but with a mind open to natural effects. These moors are like the sea in their wide undulating expanses, and like it also in hiding beneath the surface the varied forms of animal life which people it. The growths of nature are there humble and uniform. Yet the whole scene exercises a fascination to a contemplative mind. Mr. ARCHER'S mind must, we suppose, have such a turn. He is not like Mr. MACWHIRTER, A.R.A., who prefers scenes which owe their formation to violent conflicts of nature, or which still are visited by storms and rude forces. His *View from the Summit of Goatfall* is mild enough for the moment, but we can easily imagine—indeed we cannot look at it without imagining—a wild tempest raging over it. This picture was shown, if we remember rightly, at the last exhibition in Edinburgh.

Among the more strictly Scottish landscape painters, Mr. McTAGGART, R.S.A., occupies perhaps the most honoured position. A fair average of his work, unambitious but true to a simple poetic conception, are his *Sea-birds' Eggs*—an old fisherman in the stern of his boat seated with a child on his knee and a basket of eggs at his side—and his *Message from the Sea*—some children digging on the sands of a sea-shore and finding a message in a sealed bottle. This last picture has been presented to the permanent collection in Dundee by its munificent citizen, Mr. ORCHAR. Mr. McTAGGART contributes two other landscapes and a portrait of a lady, *Mrs. Lawrie*, in which there is perhaps more of the landscape than the portrait painter, particularly in the treatment of her dress. Mr. LOCKHART'S *Gil Blas relating his Adventures* we noticed at the time of its exhibition in Edinburgh. It is an extremely able work in many ways. Of Sir NOEL PATON'S *Oberon and the Mermaid* it is needless to say that it is entirely in his usual manner, and that a manner which does not commend itself to the fashion of the present day. Mr. J. E. HODGSON, R.A., sends a characteristic sketch of a marine *Off Duty*. Mr. ERSKINE NICOL, A.R.A., aims, as usual, at pathos in a scene of simple life. This time the picture is entitled *The Empty Frock*; but the poor mother is really ghastly, and not all the skill of brush which this painter commands can rescue the work from its want of true poetic feeling. Mr. R. W. MACBETH, A.R.A., is eccentric in the choice of his subject, *Phyllis on the New-made Hay*. We look down across the back of a cart-horse drawing to the front a load of hay, on the top of which is PHILLIS, enjoying the admiration of two swains lying sunk in the hay beside her. The figures are, of course,



beautifully conceived and painted. Indeed, the whole work is finely executed; but though the artist has done everything possible to reduce the apparent size of his load of hay, it still looms far too large. Mr. HUGH CAMERON is another of the Scotch academicians who never fails to present us with a modest, well-conceived, and simply-treated subject. We may instance his *Mother's Quiet Hour, At Her Toilet*, which is rather sketchy, perhaps; *A Scotch Lassie, Spring and Autumn*, and *Playmates*. Along with Mr. CAMERON'S work we may study the *Crab Fisher's Bairns*, by Mr. R. G. HUTCHISON. Mr. JOHN BURR has a different manner, though selecting the same class of subjects. His *Wayside Flower*, a girl standing in front of the edge of a cornfield, the straight stalks of which form a background to her, is skilfully conceived and painted. His *Boys Going Unwillingly to School* is clever in idea, and treated with a fine sense of harmonious colouring. Mr. GAVIN, R.S.A., by whose death the other day the Scottish Academy has lost an able member of its body, is noticeable by his *Flower Mission*, representing two young girls visiting a child's bedside in the bare ward of a hospital, and taking with them flowers to the patient. For the sake of art we could heartily wish the young girls with their flowers to be out of the picture. They are too fashionable to be in keeping with the scene, and in truth they are not at all well conceived or treated by the painter. But his bed and patient, and the bare hospital walls, are rendered with true poetry of conception and great technical skill.

Amongst other paintings that are marked by good workmanship, and more or less of poetic conception, we may mention *Crail Harbour*, by Mr. JAMES S. ORCHAR; *A Summer Breeze*, by Mr. D. FARQUHARSON, A.R.S.A.; *On the Banks of the Spey*, by Mr. BEATTIE BROWN, A.R.S.A., and *Rough Weather*, by Mr. JAMES CADENHEAD.

Water-colours form a considerable section of the exhibition, and include a fair number of really good works. Where only a somewhat hasty inspection was possible it may seem invidious to single out some for praise. But as it happened we were struck in passing with, among others, Mr. HERMANN TENKATE'S *Gamblers* and his *Refighting his Battles*, both treated in the hereditary Dutch manner. The *Gamblers* appeared to us the better of the two in the idea and general plan. *Christmas Time*, by MARIE TENKATE, is another good picture. Next to it hangs Miss CLARA MONTALBA'S *Choir of St. Mark's, Venice*, a somewhat sketchy performance; and *A Venetian Girl*, by Miss ELLEN MONTALBA, a good and characteristic piece of work. Miss LINNIE WATT has sent several coast-scenes, which will amply maintain her reputation for thoughtful, careful work devoted to scenes selected with fine feeling. See, for example, her *Breezy Day* and *Charmouth Beach*. GIUSEPPE FERRARI has a clever sketch of *A Neapolitan*. Mr. F. LOCKHART'S *Cambuskenneth Abbey* is good in many points, though we could have wished to see the river in the foreground better painted. On the whole, taking water-colours and oil pictures together, we may conclude that the people of Dundee are again fortunate in having secured for their gratification so good an exhibition.

#### M. RYDBERG ON CLASSIC ART.

A GREAT work of art is not intended to give delight to one age or to one people, and there need be little surprise when a Swedish journalist is found investigating the character of ancient sculpture. A man of that class is not likely to be fettered with conventional rules as to what is good in art, and whether he is right or wrong in his conclusions there is a chance of hearing something from him that will express the impressions which are made on an intelligent mind. M. VIKTOR RYDBERG made his first visit to Rome in 1873, and he spent several months in studying the sculpture. It is not perhaps surprising that the busts and statues of the emperors should become more attractive than works of a higher class to a writer who has a deep concern in political institutions which, although existing in the far north, shows signs of the influence of old Rome. A large part of M. RYDBERG'S work is devoted to a consideration of the character of some of the emperors, and it expresses the thoughts which are suggested by the imperial portraits. This part we shall not consider at present. In addition to the portrait sculpture, M. RYDBERG selects a few ancient statues as subjects for the exercise of his speculative talent.

The first is the *Venus of Melos*. He enters at some length into the history of the discovery of the statue in 1820 in the garden of JORGOS, and of the proceedings through which the Louvre was enriched by one of the greatest of the surviving Greek works. The narrative suggests the difficulty of obtaining accurate observation—a difficulty of which law courts have constant experience. The statue was seen by several people soon after it was exhumed from the niche, but there is much discrepancy between their descriptions. LOUIS BREST, the consular agent, who was the first Frank that saw the statue, and, in fact, negotiated its purchase, always said that when the statue was found the left arm existed; that it was slightly raised, and held an apple. According to another account, BREST said that the left arm was outstretched, while the right arm followed the contour of the body and caught the drapery, as if to prevent it from falling. So much interest was taken by BREST in the statue, which was secured by him for France on his own responsibility, that it might be assumed the details of the figure would be indelibly engraved on his memory. His description was partly confirmed by the son of the discoverer, who lately informed M. JULES FERRY that when JORGOS found the statue it stood upright, with the left arm outstretched, and an apple in the hand; but the son was uncertain about the right arm. M. DUMONT DURVILLE, a *savant* engaged in an exploring expedition, who saw the statue within a month of its discovery, records, in a description which he wrote in 1821, that the left hand held an apple, and the right grasped a garment which fell carelessly from the hips to the feet. But he acknowledged that both the arms had been removed. His companion, a major of marines, however, maintained that it was erroneous to say that both arms existed, for the right forearm was broken at the elbow, and the forearm was not visible. According to the major, the left arm was raised in the air and held an apple. It will be evident from the preceding statements that there was more or less agreement about the left arm having been attached to the body, and that it held an apple. But a letter has been preserved in which BREST announced the discovery of the statue, and in it he states that the arms of the statue were broken, but that in the niche, among other fragments, were a piece of an arm and a mutilated hand, which held an apple. It was afterwards concluded, after a special investigation, that the arm and hand could not have formed part of the statue in its original state.

On the strength of such evidence it would be unsafe to conclude that the sculptor of the Melos *Venus* represented the Deity holding the apple which was adjudged to her by PARIS; and it might be added that not one of the various proposed restorations has been able to secure general acceptance. Whether it was a VENUS that appealed to soldiers, and held a lance, an helmet, or a shield, or a VENUS that had become an historian, and was inscribing the names of brave men upon a tablet, a boudoir VENUS admiring herself in a mirror, or whether it was not a representation of some other being more noble than VENUS is likely to remain a subject for speculation which will engage many a student besides M. RYDBERG. His hypothesis is akin to that of Dr. MILLINGEN, who was the first to suggest that VENUS was holding the shield of MARS, which theory was afterwards modified so as to make VENUS be engraving warriors' names upon the shields. M. RYDBERG supposes that the statue refers to an action which might have taken place immediately afterwards. Let us suppose that the names have been cut upon the shield by VENUS. It would then be appropriate enough for the goddess to raise the shield, and turn the face outwards in order that the record might be visible to the Melians. The figure would thus become an incentive to the patriotism of the islanders. But for the acceptance of this hypothesis it is necessary to consider one action in connection with another. We must have what the lawyers call a condition precedent, and admire the statue, not only for the skill with which the shield is displayed, but for the subtlety with which the act of writing the names is suggested. The goddess no sooner completes the list of the warriors than by a sudden impulse she raises the shield, and in the excitement of the moment is indifferent to the *négligée* folds in which her drapery falls. It raises a large question as to how far a statue that was incomplete unless something was granted would be in accordance with the practice of the Greeks. If VENUS had been described as writing on a shield there would be reason in the pose, but in any case it is difficult to understand why VENUS was in so great



a hurry to show her writing that she could not find a moment to arrange her drapery. M. RYDBERG'S theory is ingenious, but it is not more likely to prevail than others which are more prosaic.

M. RYDBERG next endeavours to explain the sadness of countenance which characterises the statues of ANTINOUS. Was it suggestive of the melancholy of a youth who knew he was doomed to an early death, or has it more to do with the expression of some legendary myths in the form of ANTINOUS? The key to the mystery is supposed to be found in a group which is now in the museum of Madrid. It represents two youths near an altar looking intently downwards, as if an abyss were before them, and one of them had been summoned to enter. TIECK, the sculptor, interpreted the figures to be ANTINOUS and HADRIAN, and he was followed by Professor FRIEDRICH, and to some extent by BOTTICHER. M. RYDBERG gives to the figures a more ideal character. According to him, it is not merely the emperor and his favourite that is represented. The ANTINOUS, he believes, is suggestive of NARCISSUS, and thus indicates a soul that contemplates the mystery of life, while the companion figure may be a symbol of death or of immortality. It is related that ANTINOUS drowned himself in order to avert some calamity from the emperor. He would thus become a type of self-sacrifice. RAPHAEL was moved by the legend; and some say it is ANTINOUS which is commemorated in the figure of *Jonah* that is seen in the Chigian Chapel in the church of S. Maria del Popolo in Rome. The ANTINOUS of art, according to M. RYDBERG'S interpretation, would be the embodiment of a greater variety of character than is commonly found in man. Beauty and vigour are combined with mysticism, and youth has the gravity of a philosopher. When masquerading as BACCHUS, he recalls HAMLET. ANTINOUS is far removed from the manliness that is seen in the Parthenon friezes and in the best works of Greece, a manliness that did not trouble itself with speculations on the uses of this world. That it was possible to create so strange a type is evidence of the influence of a different ideal of life. A figure of this kind may be said to correspond with much that is expressed in modern poetry and philosophy, and pessimism can find something congenial in the contemplation of the statues of ANTINOUS.

#### PARIS NOTES.

IMPORTANT changes are about to be made in the organisation of the Ecole des Beaux-Arts. Henceforward all students, no matter to what particular branch of art their attention is specially directed—whether painting, sculpture, or architecture—will be obliged to gain a certain amount of knowledge in the other two. As to the question of the *ateliers*, which has lately given rise to discussions of a very lively nature in the press as well as in art circles, it has been decided to maintain them. In addition to the regular courses of lectures delivered by the professors in the Amphitheatre, there will be eleven studios, three each for painting, sculpture, and architecture, and two for engraving. The Superior Council charged with the superintendence of the school is likewise to be reconstituted, and will henceforth consist of the director, five members—either painters, engravers, sculptors, or architects—named by the Minister of Fine Arts, and five of the professors freely elected by their colleagues in general meeting.

The Municipal Council is earnestly carrying into execution its great and worthy scheme for the creation of technical schools in the Paris metropolis for the principal branches of industry. The next to be opened under its auspices will be one in the Rue de Reuilly, devoted to furniture and cabinet-making; while another for affording instruction in work of a precise and delicate nature—or in what are well termed by the French *industries de précision*—such as optical and mathematical instruments, telegraphic apparatus, fine machinery, watch and clock making, surgical instruments, &c., is being installed in the Passage Saint-Pierre. Finally, the City authorities have lately purchased an extensive plot of ground lying between the Avenue d'Italie and the Rue de Gentilly, upon which it is intended to construct a great block of educational buildings, including an infants' school, an elementary school for boys, another for girls, and two technical schools—one for each sex. That for the youths will, like the one already opened in the Boulevard de la Villette, be devoted to giving instruction in the varied iron and wood industries. It will take in every branch and

application of these trades, including the cutting, distribution, and use of materials, and will thus form an invaluable nursery for practical builders.

The vacant frame of one of Meissonier's pictures at the Triennial Exhibition in the Palais de l'Industrie has now been filled up. It is entered in the catalogue under No. 501 as *The Arrival of the Guests*, and represents the courtyard of a Louis XIII. château with about twenty figures, some on horse-back and others alighting from carriages, with the host receiving them on the top of a flight of steps.

M. Auguste Arnaud, an artist who at one time enjoyed considerable celebrity, has just died suddenly in Paris. He will be chiefly remembered for his *Vénus aux Cheveux d'Or*, and for the statues of an *Artilleryman* and *Light Infantry Soldier*, erected on the Pont de l'Alma.

Owing to the decision lately taken by the Municipal Council, that the new Hôtel de Ville shall be lighted throughout by electricity instead of gas, as originally proposed, much labour and money will be absolutely thrown away. The meters, pipes, &c., for gas have, unfortunately, been already laid down almost throughout the immense building. These will not be removed, being left as a reserve in the event of anything happening suddenly to the electric light, but the floors all have to be taken up again in order to lay down the wires, for which also channels must be made in the thickness of the walls and arches. The system of electric lamps adopted is particularly convenient, inasmuch as each globe can be moved a distance of 6 feet 6 inches in every direction without interfering with the distribution of the light. To allow of this a coil of the conducting wire is wound round the foot of each lamp.

M. Ferdinand de Lesseps, acting, of course, on behalf of the Panama Canal Company, has hit upon a novel and ingenious way of bringing that gigantic undertaking clearly before the Parisian public, to whom he looks in great part for the necessary funds to carry it into execution. Some time ago he commissioned MM. Rubé & Chaperon to paint a panorama of the proposed canal and the country through which it will pass. The work is now finished, and has been erected above the offices of the Canal Company. The opening ceremony took place last week, when M. Dingler, the chief engineer in charge of the works, delivered a lecture explaining the plans and method of working adopted. The panorama is pronounced by competent critics to be a very faithful representation of the course of the canal, and is, moreover, well executed. It is to be open free to the public, and will doubtless in great measure fulfil the expectation of M. de Lesseps, by popularising the idea of the interoceanic waterway, to the realisation of which the great projector is now devoting his energies.

In accordance with a resolution passed in July last by the Municipal Council, the Director of Public Charity (de l'Assistance Publique) has just purchased for 12,000*frs.* the château and park of Brevannes, in the commune of Limeil (Seine et Oise). This property, which contains about 19 acres of fine park-land, is to be turned into an asylum for the aged of both sexes. The accommodation thus provided will set free 250 beds in the various Paris establishments of the Assistance Publique, whose means of usefulness will thereby be enormously increased.

At the quarterly general meeting of the Institute, held last week, the great biennial prize of 20,000 *frs.* was awarded to M. Meyer, Director of the Ecole des Chartes, by 48 votes against only 7 obtained by M. Maspero, Director of the Boulak Museum at Cairo. The successful candidate had been nominated by the Académie des Inscriptions et Belles-Lettres; to whose turn it fell this year to recommend a recipient.

#### ART EDUCATION IN ENGLAND.

AN address was delivered by Sir Rupert A. Kettle, as president of the Art Department of the Social Science Congress at Huddersfield, in which the progress of education in art in this country was reviewed. Sir Rupert said that art education had been under discussion for the last fifty years, but we had not arrived at a consensus of opinion as to the best mode of establishing a national system. Fifty years ago we spent more money in purchasing works of art than any other nation, and at that time the popular taste was only just beginning to rise from its very lowest level. The enormous increase of national wealth which followed the introduction of the steam-engine produced great changes in



the state of the arts, for as men grew rich they surrounded themselves as their predecessors in estate had done with works of art and art work. Though some of the achievements of our native artists ranked among the finest productions of any age or country, the works of foreigners were preferred. Of pictures alone more than 1,000 were annually entered inwardly at our Custom House in the ten years after 1835; while the sales at the Royal Academy Exhibition produced in each of these years not so many hundreds of pounds as they now produce thousands. As the supply of genuine objects was exhausted, the trade of imposition set in. This even would not have aroused public opinion in favour of art education had not we been dependent in those manufacturing trades in which the elements of taste entered upon foreign designers for patterns. In the course of time foreigners sent us the manufactured articles instead of the patterns, and it was not a year too soon when, in 1835, Parliament tried to extend the knowledge of the arts and principles of design among the people, and especially the manufacturing population of the country.

With the Great Exhibition of 1851 began our present comprehensive system of art training. We have as part of our ordinary system of elementary education in our voluntary and Board schools, each year, no less than 600,000 young persons of both sexes under instruction in drawing. This includes between 12,000 and 13,000 pupil-teachers. The pupil-teacher, when he has served the requisite time under a certified master, passes on to a training college, where drawing is continued. To obtain a certificate as a class master, a candidate is required to be much more advanced in art than an ordinary schoolmaster—he must pass a much more severe examination. The masters of the art schools are subjected to a much longer and much higher training than certified class teachers. To the large number who learn drawing in our ordinary elementary schools must be added at least 200,000 pupils each year under more or less advanced art education. Of all classes there were upwards of 800,000 pupils under actual instruction last year. The direct payment out of public funds was 53,441*l.* and 39,198*l.*—less than half a crown per annum per pupil. Of course these payments are supplemented by private contributions and school fees. There is no considerable town in England now without a school of art, and in almost every large village there is an art class. Having perfected his knowledge and skill in what is strictly school work, the pupil has acquired the art of freehand drawing. So far his progress is imitation, without invention—without imagination. This is the end of the elementary part of his art education, and the foundation upon which all true art training must be based. Freehand drawing, then, is an art, although not of that class which is called a fine art. It is the rudiment of pictorial art, and, to a certain extent, of plastic art also—the two important branches of the fine arts. A man who has been trained in freehand drawing, when he wishes to describe any object, can pictorially represent that object. In a manufacturing country, the advantage of this, both to employers and workmen, cannot be over-estimated. We are every year giving this faculty, in a greater or less extent, to upwards of half a million of our working classes. This benefit is, of itself, worth all the money expended upon it. More failures than we might expect occur in the higher departments of study. Failures may arise from pupils going up too early, or the examinations being too stiff. This state of things does not affect the result of our substantial success in teaching freehand drawing. It is much to be regretted that the first impression of the public, when national schools of design were opened, was that it would be possible at once to teach design, without going through the laborious and somewhat dilatory process of thoroughly learning freehand drawing.

There is educational use in our museums and galleries. General art culture is a direct mode of creating a pure public taste. The trained weaver will know artistic metal work when he sees it. The potter who has learned to love his beautiful vases and plaques will see when a chair is graceful or a wall-paper appropriate. There was, and is, the great public to be taught to appreciate art so far as to be able to select that which is beautiful, and to reject that which is ugly. Beauty has an almost infinite variety of phases, and does not present itself to all observers in the same kind or in the same proportion. If a hundred or a thousand persons see a beautiful object, they know it is beautiful. Difficult to describe concisely, it is almost impossible to communicate a knowledge of it orally. A critical knowledge of beauty can only be taught by example. Hogarth first laid down his "line of beauty," and then made his graphic illustrations in conformity or contrast with it. South Kensington has been subject to merciless and persistent jeers and scoffs. But it has grown beyond the reach of satire. Occasional mistakes may have been made. The general result is a triumph to its founders. Broken up and sold at Christie's, the articles bought with public money would realise a total sum more than double their cost. The donations and bequests of Dyce, Forster, John Jones, Ellison, and Sheepshanks gave evidence of the approval of, not only competent, but eminent judges of art of the institution. If the museum has done nothing else, it has certainly created a sounder knowledge and fostered a better taste among our wealthy middle class. It is, in connection with the art college that its educational influence is most directly felt. There is not a designer in any branch of trade, who has mastered the

principles of freehand drawing, but can find in the museum an exemplar to guide him in his work. It is inevitable that rival artisans from abroad derive their inspiration from South Kensington equally with our own countrymen. Ample provision is made for the exhibition of examples in the great seats of industry in the country as well as within the stationary museum in London. Loans of objects for one year, changeable periodically, are made to permanent museums established and controlled by municipal corporations. By the National Gallery (Loans) Act, 1883, the trustees of that institution have now power, under certain restrictions, to lend pictures for the purpose of local exhibition. We have also always open among the silk-weavers in the poorest part of London the Bethnal Green Museum. Our great provincial towns, too, have given to their art schools the aid of museums of examples and picture galleries. Enough, then, is being done to educate the public taste. The highest object of study is pure art, the production of works intrinsically beautiful or beautiful by association, apart from any special purpose they are to serve or use to which they may be applied. In cases where it is wise to train pupils in the highest department of art, our Government college cannot give the best training. The system of the South Kensington institution seems more adapted to applied than to pure art—to what are called the decorative, the ornamental, or, lower still, the industrial arts. The *genius loci* calls up an indistinct idea of an indefinite something which draws the mind from the art itself to its saleable value. The Royal Academy has of late years carried on a most important educational work at Burlington House. Many students prefer the Royal Academy to South Kensington. The Academy—a private corporation—does for this country what is done in France by the Ecole des Beaux-Arts, a State-supported institution. It also does much work that is done, upon payment of large premiums, in the *ateliers* of foreign artists. At the present time there are 413 students on the books—22 sculptors, 176 architects, and 215 painters. The Academy spends of its own money nearly 7,000*l.* a year upon its schools. South Kensington should draw the line more distinctly between art pure and applied art. The latter is a work quite as onerous, and, all things considered, more extensively useful than the former. Pure art and applied art should be kept distinct, as far as is convenient in practice, and always in thought. If the distinction suggested were now carried out, we should expect to find among the gold medallists of the department—as being probably the most competent pupils—a greater proportion of designers and fewer drawing pupils than among the silver medallists, and so among the silver over the bronze. But what is the fact? In 1882 there were ten gold medals awarded, four only for design work proper. There were forty silver medals awarded that year. Of these, one-half only were for design. One work for which a bronze medal was awarded was for studies treating natural objects ornamentally. Almost all artisan pupils desire to become painters. Many a good art workman is lost without being replaced by an artist. Our local schools of art receive annually large contributions. A part might be usefully devoted to forming special classes in which artisans who had mastered the elements of art knowledge, and acquired skill in execution, could be taught the practical application of their knowledge to trades. They are so taught in other countries. This can be best accomplished by dividing the subjects into classes. They may be classed as—1, pictorial; 2, plastic; 3, textile. These can be subdivided according to their uses. Art objects are either decorative or decorated. Decorative objects should be intrinsically ornamental, self-contained, and complete, not dependent upon extraneous aid for their effect, but beautiful in their own form, colour, and sentiment. Decoration is something applied; the object to be decorated is the first consideration. It is in teaching the designer to conventionalise natural forms that the aid of the trained eye of the master is required. The institutions founded by the great chartered companies of the city of London seem admirably suited to carry on this work. Since 1851 we have made most satisfactory progress in all those staple industries which require taste and art knowledge for their success. We are producing not only the best decorative ceramic ornaments but the most beautifully decorated useful pottery in the world. Our metal work, from cathedral screens to domestic brasses, is a manufacture of which we may be proud. Without speaking of the special manufacture revived in Venice, no country has at any time produced such pure, brilliant, flint glass as the English makers now give to the world. As to design, whether in cut, engraved, or moulded glass, whether in rock crystal, or cameo work, no such art glass was ever before seen as that which is now being produced in England. The work of English artists has wonderfully improved in drawing and in careful attention to accuracy of detail; and this has been effected without impairing the boldness and perfect freedom of touch which is characteristic of the best masters of the English school. This improvement is due to the fact that so many of our best painters have been pupils at Burlington House. The progress in refinement and purity of taste among the general public during the last forty years has not been so satisfactory as the improvement among the professors of the different branches of art. The impediments to progress in the former case have been greater, more obstinate,



and more difficult to assail. When the attack upon vicious taste began, King Sham and his kinsman Rococo had long been in possession of the field—they were firmly established. Vested interests die hard. Even down to our own day the forces opposed to good taste have considerable vitality, and, by accidental accretion, occasionally form themselves into something like organisation. They erect a barricade of fashion, and defend themselves behind it. At one time it is the reconventionalised hyper-conventionalism of the Japanese that is brought into fashion. At another time work in genuine old Dutch taste, corrupted, is called "Queen Anne." The revived taste for church ornaments is pushed into ecclesiasticism. By the hold which historical associations always has upon English sympathies, the taste of the middle ages is inflated into mediævalism. And now a weedy variety of conceit run to seed is called æstheticism. True taste will not always yield to the breeze—literally the puff—of fashion. By vigorously pursuing the course upon which we have entered, and closely attending to directness of aim and object, we shall in time found upon a true standard of beauty and fitness a distinctly national and pure style of decorative art.

### ITALIAN SCULPTURE AT SOUTH KENSINGTON.

A DESCRIPTION of some of the examples of Italian sculpture lately secured by Mr. J. C. Robinson for the South Kensington Museum has been contributed by that gentleman to the *Times* :—

It will be convenient, he says, in some cases, to take specimens together, whether obtained for South Kensington or Birmingham—that is, when the objects seem to illustrate each other. Thus, one of the most notable works obtained for South Kensington in 1881 is a marble frontal of an altar or shrine, which there is every reason to believe is nothing less than the original front of the shrine of the famous mediæval saint, Santa Chiara (Clara) of Assisi; and one of my recent acquisitions for Birmingham is a Greek marble sarcophagus of the ninth or tenth century, of great size, which I think also will be found to have been a shrine for the relics of a saint rather than an ordinary sepulchre. If this be so, it will be the third monument of this nature which I have had the good fortune to bring to this country. The other example is the sarcophagus shrine of Santa Giustina, of Padua, an authentic work of the immortal Donatello, which was obtained in the neighbourhood of Padua in 1879.

In mediæval periods the shrines of saints were sometimes monumental structures, standing detached and complete in themselves, and sometimes they were enclosed within or actually formed the body of altars—often the splendid high altar of the church built in honour of the saintly personage. Very few examples of either kind of these shrines have come down to us in their original unaltered state. The influx of wealth from devout worshippers, and the never-ceasing desire to do greater honour to the saint, in nine cases out of ten caused the primitive structures to be remodelled, added to, and embellished, or even reconstructed from age to age, on scales of ever-increasing magnificence. Thus the earlier or primitive receptacles provided for the saintly remains were more often than not, in the long run, discarded. Stone and marble were replaced by bronze, silver and gold, florid metal work, marble inlays, mosaics, gems, and enamels. This was doubtless the fate of the three monuments now in question. As regards two of them, indeed, their exact place and position in former times are known, and not improbably further research will reveal the original *provenance* of the third. A word or two more about mediæval shrines, and a reference to examples still to be seen *in situ* will assist your readers in forming a clear idea of the nature of the monuments in question. In this country we have two ancient detached shrines of great archæological interest—King Edward the Confessor's shrine in Westminster Abbey and the recently-discovered and reconstructed shrine of St. Amphibalus at St. Albans. Of the one paramount structure of this kind, which once adorned this country, the shrine of St. Thomas at Canterbury, the wonderful descriptions are all that remain to us. The Arca di San Domenico at Bologna, and the famous shrine of St. Antonio at Padua, are perhaps the most sumptuous and admirable of the detached shrines now extant; while the Roman churches supply some notable examples of shrine-altars, if I may so call them. In that most Catholic country, Spain, I can call to mind only one notable mediæval detached shrine—that of San Vicente at Avila. Donatello's sarcophagus shrine of Santa Giustina, already alluded to, after having, in all probability, for more than two hundred years contained the bones of the sainted princess and patroness of Padua, was summarily discarded as a rough, old-fashioned, and unworthy receptacle, utterly regardless of the infinite beauty stamped upon it by the genius of the peerless fifteenth-century sculptor. Early in the seventeenth century—the age of florid decadence—a huge and costly high altar of precious marbles, gilded metal, and mosaics rose above the spot it had occupied; Donatello's work was doubtless sent as useless rubbish to the mason's yard, and probably it is only by some mere accident that

it escaped being sawn up and used again as waste marble. In any case, it was found only three or four years since in a vineyard without the walls of Padua, with its sculptured face hidden against a wall, and doing duty as a horse-trough. The marble frontal of Santa Chiara, on the other hand, was obtained in 1881 from a Florentine dealer, who had recently found it in the possession of a marble mason in the neighbourhood of Assisi, and the real nature and origin of the work were unsuspected until it fell into my hands. The world-renowned mediæval ascetic, St. Francis, founded his community at Assisi early in the thirteenth century. His teaching and example inspired with the like religious fervour a noble young lady of the district, by name Chiara, destined also to obtain the honours of canonisation, and to become the founder or patroness of a religious order. As I am writing in the country, without any means of reference at hand, I must beg to be excused if there should be any slight inaccuracies in my facts and dates; but I believe Santa Chiara died some time before the middle of the thirteenth century, shortly before her patron and instructor, St. Francis. The rapidity with which the doctrines of St. Francis made their way throughout the civilised world, and the fervent enthusiasm which caused the immediate construction of the magnificent church dedicated to him at Assisi, are well-known facts of history. Everybody knows that the famous monastery speedily became a very temple of the arts, and that immediately, and for a century or two afterwards, the contributions of myriads of pious devotees, freely expended on frescoes and sculpture, attracted to Assisi the services of the most eminent painters, sculptors, architects, and other art-craftsmen of Italy. I am under the impression that St. Francis himself began the building of a church at Assisi to the memory of his friend and pupil; at all events, the church of Santa Chiara in that town, which still exists, though much altered and modernised, was completed in 1253. The architect was Fra Filippo di Campello. The body of Santa Chiara was placed under the high altar, where, I believe, it still lies, and in all probability the shrine frontal now in question was designed, and perhaps even actually executed, at the time by Fra Filippo himself.

I have not been able to visit Assisi to verify the present status of the altar-shrine, but I believe the original receptacle and its surroundings have been done away with and replaced by florid seventeenth-century work. There is no record as to when the present slab, which doubtless formed the side or front of the high altar, within or under which the body of the saint was deposited, was removed, but that such was its original place is sufficiently indicated by the following inscription, cut in finely-formed Longobardic characters on a band or fascia along the upper edge of the slab :—

Vita præclara  
Refulges nomine Clara.  
Norma reclusarum;  
Speculum sine tæbe clarum!  
Inclita cunctarum  
Christi jacet hic famularum.

The sculptured decoration, in bold relief, consists of an arcade in eight compartments, five of which are filled in with beautiful foliage, springing from vases and birds, the other three with figures of six-winged seraphim standing on flowering plants, and with the symbols of the Evangelists St. Mark and St. John. In the upper part the spandrels of the arcade are filled in with seated figures of winged angels. The work is highly finished and masterly, and the foliated ornamentation is of most elegant and original design. Reminiscences of the Classical acanthus type are apparent, and the manner in which the vertical foliated stems spring from vases and animal forms shows a clear affinity with earlier types in the mosaics of Ravenna and other Romanesque sources. Nevertheless, new and vigorous motives and style are still more obvious. The *genius loci* had evidently stimulated a new enthusiasm in art as in religion. Apart from its archæological interest, then, this work has a high value as an authentic evidence of style in Italian ornamentation of a definite period and locality. The sarcophagus recently obtained for the Birmingham Museum is an older work, I think not later than the eleventh century, and it may be much earlier. It was obtained in Venice, almost at the moment of my departure, so that I had no opportunity of examining it with sufficient attention, nor of transcribing a Latin inscription, which in deeply-cut Longobardic letters, 3 inches or 4 inches high, runs along the upper margin as in the previous example, but extending in the present work all along the four sides. This sarcophagus, in large grained Greek marble, may be described as a massive rectangular or altar-shaped trough, hollowed out, the cavity capacious enough to contain the body of a man; its shape is thus similar to the shrine of Santa Giustina, already described. The four sides are finely sculptured with foliated and interlaced ornaments, of Romanesque or Byzantine type, and in general style and appearance the work somewhat resembles the very ancient well-head from Murano, obtained the year before for South Kensington. There was some mystery as to the exact *provenance* of this sarcophagus. It is understood to have been acquired at Torcello; there can be no doubt, in any case, that its original place was somewhere in the immediate neighbourhood of Venice.

Somewhat similar in style to the ornamentation of the Santa Chiara frontal are two beautiful portions of shafts of twisted



columns, richly sculptured with foliage and boy angels. These were obtained in 1881 from Pisa, and they were said by the vendor to have formed portions of a monument, originally extant in the cathedral, of the class and character of the famous pulpit, the work of Nicola da Pisa, which is one of the chief glories of that famous church. I am not aware if any authentic record exists of the existence, at a former period, of any such structure in the cathedral, but it is by no means improbable. Certainly no respect for art or antiquity would have weighed with the ecclesiastical Vandals of a century or two ago, any more than with modern "restorers," if the place occupied by any ancient monument of obsolete use were required for some new purpose or more showy erection. From a careful consideration of these shafts, and judging from various indications, I come to the conclusion that they were portions of the supporting columns of a baldachino or altar canopy, such as may be still seen at Sant' Ambrogio at Milan, St. Mark's in Venice, and, more familiar still, in Bernini's celebrated bronze baldachino over the high altar of St. Peter's in Rome. The supporting columns of the latter work, it will be remembered, are twisted and wreathed round with foliage, &c., doubtless in imitation of earlier types, such as the present specimens. Although the boy angels or *amorini*, to be seen playing among the acanthus foliage, which runs spirally around these shafts, have unusual life and freedom of movement, and at first glance have a somewhat modern aspect, I do not think the work is later than the first half of the fourteenth century. This advanced style, in fact, is an evidence of the remarkable revival of art based on direct imitation of the antique, brought about at this early period, by Nicola Pisano and his immediate scholars. That the sculptor of these fragments was a great master of his art is patent; it would be no unlikely conjecture, indeed, to ascribe their authorship to Andrea Pisano. Spiral or twisted shafts and columns are characteristic motives of Italian architecture and ornamental design, at nearly all periods, and they are familiar to the traveller in hundreds of examples of varied application; but it should be noted that this favourite motive is mainly confined to Southern Italy and Sicily, and that, except as regards the late florid adaptations of the sixteenth and seventeenth centuries, it is seldom to be seen in Italian architecture north of Florence. Rome was probably the original seat of inception of the idea, and the earliest examples of twisted columns are to be sought in debased Classical work of the Lower Empire period. A curious chapter might, indeed, be written upon twisted columns. In Spain, for instance, during the sixteenth and seventeenth centuries, a positive mania arose for this sort of column, then commonly known as "pilares Salamonicas," and they were regarded as a specially ecclesiastical and sanctified type, from a strange notion that Solomon's Temple at Jerusalem was adorned with them. That this idea also prevailed in Italy is evidenced by the fact that Raphael, or rather Giulio Romano, has introduced splendid twisted columns as the chief decoration of the "beautiful gate" of the temple in the well-known Hampton Court cartoon.

Two other examples of twisted shafts were among my gatherings in 1881. The more notable of the two is a very elaborate and beautiful column of white marble, the spiral convolutions elaborately moulded with reeded and channelled work. This shaft, which is about 6 feet high and 8 or 9 inches in diameter, is complete with the exception of the capital. I found it in a stone-mason's yard outside the walls of Rome, and I believe that it was originally a detached column or candelabrum, to support the Paschal candle, in one of the old Roman basilicas. Although of fine execution, the work is of early period, dating, perhaps, as far back as the eighth or ninth century.

Undoubtedly the most important of my recent gatherings is the sculptured pediment or *tympanium* from the great western doorway of the now desecrated Abbey of La Misericordia at Venice, a masterpiece of the famous Venetian sculptor Bartolommeo Bon, the author of the capitals of the Ducal Palace. This church, to the discredit of the Venetian Municipality, is now being destroyed piece-meal.

### THE ROYAL SCOTTISH ACADEMY.

ON Saturday last Mr. Perigal, R.S.A., responded to the toast, "The Royal Scottish Academy," at the luncheon which followed the opening of the Dundee Fine Art Exhibition. The Royal Scottish Academy was, he said, founded fifty years ago, and was now in a very prosperous position; very different, indeed, to what it was in early days. Contrasting their present galleries with the modest rooms in Nicholson Street, where the first exhibition was held, they felt they owed a deep debt of gratitude to the first members, and to the artists, and to the friends of art who assisted them in founding the Royal Scottish Academy, such as the late Mr. Hamilton, architect; Mr. Nicholson, then the secretary; and others. When he looked back on those days and compared the state of art in Scotland some forty or fifty years ago with its condition now, they had indeed good cause to be proud. The present generation of artists were as clever comparatively, and the prices they obtained for their works were very many times greater.

The Royal Scottish Academy had done, and was doing, good in diffusing the love for the fine arts, and elevating and improving the tastes and morals of the people. They supported a school for study from life free of expense, awarded prizes besides, and gave the students such an art education as could not be had elsewhere in Scotland, and hitherto without any aid from Government grants. The fruits of this scheme were now seen in the number of annual exhibitions of pictures in provincial cities, and they were justly indebted to their wealthy merchants in the purchasing of their works. In this respect Dundee held a very prominent place, and he congratulated many of the leading men on the fine collections they had formed. The Scottish school of painting deservedly held a very high place indeed, shown by the strong mark made by so many Scottish artists in the Royal Academy of London. Still they had some left to sustain the credit of the Scottish Academy. They were most fortunate in having such efficient office-bearers in their worthy president and secretary, and others, who, he regretted, were not present that day. He was very glad to see the fine collection of works of art in the Albert Hall, which fully sustained the reputation of Dundee. He had just returned from a two months' tour in the south of Europe, and had seen many of the exhibitions of modern schools of art in Munich, Brussels, and other Continental cities, and he thought our Scottish and British schools compared most favourably with the present state of art on the Continent, especially in landscape painting. And this was somewhat to be wondered at, considering the magnificent collections of the old masters of the Venetian, Spanish, Flemish, and Dutch schools there. Scotland possessed grand and varied scenery, peculiarly fitted for the landscape painter; and the Scotch, besides being a very practical people, were really a very poetical people, and had a fine appreciation of what was good in art and poetry, so there was little fear of the future of art in this country.

### BUILDING IN GLASGOW.

AT the termination of his year of office, the Lord Dean of Guild in Glasgow reviewed the work of the court for the year, which ended on August 31. His lordship said: A year ago I had occasion to point out that from 1876 there had been an unbroken decline in the amount of work sanctioned by the court until in 1881 the report showed only a total valuation of 307,640*l.*, but that 1882 had seen the turn of the tide, the aggregate being 378,690*l.* I am glad now to be able to say that the rise has been continued, the amount in the year just closed being 594,443*l.*; and if the Municipal Building plans (which have been considered by the liners, and come before the court to-day for final decision) had been included, their valuation being 250,000*l.*, the total for the year would have been swelled to 844,943*l.* As might be supposed from the fact that a year ago 0.86 per cent. of dwelling-houses in the city were standing empty, the increase in new work this year has not been in that department. On the contrary, the dwelling-houses sanctioned in the year just closed only number 391, containing a total of 995 apartments, equal to an average of 2.55 apartments to the dwellings, as compared with 512 houses, containing in all 1,282 apartments, or an average of 2.5 apartments to the dwelling, in the previous year. It may be remarked in passing that this year's number of dwelling-houses sanctioned is the lowest yet reached since the city was so greatly overbuilt in this respect, but it is a cheering circumstance that, simultaneously with this prudent limitation of building, there has occurred an increased rate of growth in population, so that the excess of dwellings is being absorbed rather more quickly now. A year ago I could only report an addition of 1,909 to the occupied houses; but from figures kindly furnished by Mr. Nicol, city chamberlain, I find that this year the increase is 2,813. The result is that, while the unoccupied houses twelve months ago amounted to 11,804, equal to 9.86 per cent. of the whole number then in existence in the city, it is now reduced to 9,421, or 7.84 per cent. of the present dwellings—the loss of annual rental from this cause being reduced from 118,833*l.* to 100,244*l.* The lowest rented houses—say those under 4*l.* rental—appear to be most in excess of the requirements, no less than 15.4 per cent. of them being returned as empty; while of those of 4*l.* rental and upwards, the percentage empty is only 7.2. The greatest advance in the year's linings is under the head of warehouses, stores, and workshops, the valuation of these being 291,832*l.*, compared with 154,755*l.* in the previous year—showing a difference of 137,077*l.*, which may probably be fairly regarded as an indication of a sound state of business generally in Glasgow. Under the heading of "public buildings" may be mentioned the Clyde Trustees and Inland Revenue offices, 44,000*l.*; baths (three establishments), 55,000*l.*; church halls, 2,700*l.*; Roman Catholic college, 12,000*l.*; two Board schools, 20,500*l.*; and sundries, 3,800*l.*—making together 138,000*l.*, against 62,295*l.* in the previous year, or an increase of 75,735*l.* The additions and alterations sanctioned are a little higher than in the previous year, but do not call for special notice.

The New Streets, completed at a cost of nearly 100,000*l.*, were opened on Wednesday in Newcastle-on-Tyne.



## NOTES AND COMMENTS.

SIR RICHARD TEMPLE, who has presided over the Social Science Congress at Huddersfield, followed a common practice in endeavouring to bring architects into disrepute. In architecture, according to Sir RICHARD, the want of a truly artistic education was conspicuous. In whatever department of art the architect was engaged he wanted sound instruction: first, in what was known among artists as composition and effect; and, secondly, in chromatic skill and arrangement of colour. This was said after hearing a paper on "Oriental and English Art," by an architect; and it would suggest that Sir RICHARD was judging Western work by an Eastern standard. English architecture may have its faults, but would Sir RICHARD TEMPLE like to live in a house in this country which had been designed for him by an Indian?

THE usual autumn black and white exhibition has not been held in Glasgow, because it was found that last year's exhibition was not appreciated by the public. The sales of the spring exhibition of the Institute of Fine Arts were, however, satisfactory, amounting to 5,454*l*. A demand having been made by the trustees of the late Mr. A.B. STEWART for the repayment of a sum of 2,000*l*. lent by him to the Institute, the council have been compelled to sell the Institute pictures.

A PAPER on the "Sculptured Stones of Scotland," by Mr. THOMAS ARNOLD, architect, was read to the Gaelic Society of London on Wednesday evening. The writer, besides describing the general interest attached to these stones, dwelt on the Celtic art they exhibit, the indications of date from the costumes of the figures, &c., and the clear evidence of the Christian faith, not only in the Cross, but also in the groups of figures frequently associated with it. A large portion of the paper was taken up by an interpretation of the "symbols," which have heretofore been a mystery to Scottish archaeologists. Mr. ARNOLD's explanation, which applies to every known example, is very simple, and in that respect contrasts with all former theories. These symbols, as he showed, are representations of the arms, armour, and ornaments of distinction worn by chiefs, and are disposed in groups according to a kind of primitive heraldry. The principal emblems or symbols he explains thus: 1, "the crescent ornament," orbicular shield; 2, "V ornament," short pike or sword, shown as an emblem of death, if broken; 3, "Z ornament," the lance, shown broken. (In the V and Z ornaments the points and hilts are invariably very clearly distinguished.) 4, "spectacle ornament," double fibulæ to fasten the mantle of the chief; 5, "oblong figure," tunic or hauberk; 6, "the elephant figure," a conventional rendering of the lion of Scotland. Mr. ARNOLD concludes that these stones were erected during the tenth, eleventh, and twelfth centuries, and believes they mostly commemorate chiefs who have fallen in the battles with Norse invaders.

THE Paris Works Department has just published a statement of its expenditure during the ten years 1872-1881, upon public works of every kind—roads, paving, drains, water-supply, lighting, parks, promenades, and new buildings (exclusive of the sums devoted to university and college extension). In this return out of a total of 654,000,000 frs. (26,160,000*l*.) works classed as new amount to 398,000,000 against 256,000,000 spent for maintenance and repairs. The former category may be analysed as follows: Construction of new streets, 230,000,000; water-supply and drains, 47,000,000; lighting, 3,000,000; public promenades, 7,000,000; and new buildings, 110,000,000; while the repairs, &c., are divided under the heads of—maintenance, cleansing, and watering of the streets, 139,000,000; water-supply and drains, 8,000,000; lighting, 78,000,000; keeping up parks and promenades, 3,000,000; repairs to buildings, 29,000,000. In the ten central arrondissements of the city 246,705,107 frs. 62 cents was expended on new works against only 150,662,735 frs. 9 cents in the other ten outlying arrondissements, a difference of more than 96,000,000. This is, however, more than accounted for by three great undertakings—the Hôtel de Ville, the Avenue de l'Opéra, and the new portion of the Boulevard St.-Germain, which may be considered of general rather than local interest. On the other hand, under the head of repairs,

the outlying districts took rather more than the central ones, the respective figures being 131,784,897 frs. 23 cents against 123,697,595 frs. 39 cents. The new streets constructed within the boundary line of the fortifications, during these ten years, have a total length of 25,761 mètres (about 16 miles), the arrondissements most favoured in this respect being the 20th, with 4,128 mètres; the 13th, 3,693 mètres; the 18th, 3,469 mètres; and the 14th, 2,180 mètres. In the 9th no new thoroughfare was made, and in the 3rd only a small street 60 yards long.

THE Towns Improvement Committee of Newcastle-on-Tyne have been examining the public buildings in the city, in order to report upon the means of egress. Eighty-one buildings were visited, and it would appear that in the opinion of the committee there were defects in all of them—a statement which is almost incredible. Particulars of suggested alterations were sent to the persons who are responsible for the condition of the buildings, and in many cases the suggestions have been adopted.

A PARLIAMENTARY Report has been issued which shows that the advantages of water carriage in this country have been latterly ignored mainly through the influence of railway companies. The total length of canals in England is 3,085 miles. Of this only 1,445 miles are worked by purely canal companies and independent, 119 miles are turned into railways, 1,383 miles are guaranteed or owned by railways, and 188 miles are completely derelict. There are also 927 miles of waterway (principally improved rivers) held by public trusts. The subject was also treated in a paper which was read at the Social Science Congress. It was shown that in Belgium a quantity of iron can be carried for 6*s*. that in England would cost 15*s*. Steel wire is brought by water from Antwerp and delivered by a through rate in Birmingham, a distance of 313 miles, for 16*s*. 8*d*. If the waggon containing it were shunted and sent to London the charge would be 28*s*. 4*d*., although the distance is only one-third. These figures are eloquent in favour of the Manchester Canal, and there are many other towns which would be improved if the inhabitants would give attention to the old-fashioned method of communication by means of canals.

THE School of Art-Wood Carving, Royal Albert Hall, has reopened after the usual summer vacation, and we are requested by the chairman of the committee, Colonel Donnelly, R.E., to state that some of the free studentships both in the day and in the evening classes, which the committee are able to offer in consequence of the aid afforded to the school by the City and Guilds of London Institute, are at present vacant. Orders for carving are executed at the school, designs and estimates being supplied, and the committee would be glad to co-operate with architects in the execution of designs for internal decorative wood carving, a branch of the art which they especially desire to develop. The school is open to amateurs, as well as to those who intend making wood carving a profession. To those amateurs who are unable to attend the classes information can be given by letter and examples supplied. All necessary information, with forms of application and prospectuses of the school, may be obtained by personal application or by letter addressed to the manager.

A PAPER was read at Huddersfield which advocated the compulsory erection of art galleries and museums as well as free libraries. But it did not meet with approval. At present it is optional whether libraries are founded, and there is no authority for applying the rates in towns to museums. In consequence, there are very few free libraries, and when there are museums in provincial towns they are generally useless. At the same time, both libraries and museums can be made to add much to the advantage of the community. Anyone who has paid a visit to the Mitchell Library in Glasgow, or the Free Library in Manchester, will be able to testify to the crowds of people who are to be found there in the evenings. A good museum, like those in Exeter and Edinburgh, is also certain to attract a great number of people. When this is the case, it is unreasonable to suggest, as was done in Huddersfield, that the advocacy of those institutions means nothing but communism.







Our Architect, Oct. 13<sup>th</sup> 1883.

WIGMORE STREET.  
for MESSRS DANIELL & SONS,  
ERNEST GEORGE & PETO Archts.

















STOODLEIGH COURT, DEVON.  
ERNEST GEORGE & PETO, Arch<sup>ts</sup>.



"INK-PHOTO," SPRAGUE & CO., LONDON.



Oct 13<sup>th</sup> 1883.









## ILLUSTRATIONS.

STOODLEIGH COURT, DEVON.

THIS house, which is now building for Mr. T. CAREW DANIEL, is most picturesquely situated among the fine rolling hills of Devonshire, about six miles from Tiverton. The house is arranged in the form of the letter L, and is built of stone quarried on the estate, with mullions and dressings of Ham Hill stone. The roofs are of red tiles. The hall, 60 feet by 26 feet, with open oak roof and large hooded fireplace at one end, and an arcaded gallery (giving access to the bedrooms along two sides), forms an important feature, and has a large bay in one corner, somewhat after the manner of the old college halls. Grouped round this hall are the drawing-room, 50 feet by 20 feet; morning-room, library, dining-room, &c., the billiard and business rooms occupying the corner between reception-rooms and offices. The kitchen, scullery, larders, &c., are arranged round a separate courtyard. The archway shown on the right of the picture gives approach to the stables. Messrs. GEORGE & PETO are the architects. The contract for this work has been taken by Messrs. PETHICK BROS., of Plymouth.

NOS. 42, 44 &amp; 46 WIGMORE STREET, W.

ANOTHER example of Messrs. GEORGE & PETO's work is the building in Wigmore Street for Messrs. A. B. DANIELLS & SONS. This is built in red brick and buff terra-cotta dressings; the latter by Messrs. DOULTON. The lower or shop storey is arcaded. All the ornament is in low relief of the Early Renaissance period. In execution this building makes a remarkably effective structure. It was carried out by Messrs. WALL BROS., of Kentish Town.

ENGLISH CHURCH, TARASP.

THIS church has been erected for the benefit of the many English who frequent the baths of Tarasp. It is in a beautiful position on the mountain side. The walling is of stone quarried on the site, the mullions and stone dressings being of the hard tufa brought from the hill-tops. The tower, with gable and saddle-back roof, and with the *flèche* above, is a thoroughly Swiss feature. The building was designed so as to be in harmony with the place. The pulpit, of oak, is the work of Mr. FORSYTH. The builder, who has done his work well, is M. MICHEL, of Sûs, in the Lower Engadin.

Lady ASHBURTON contributed largely to the building of the church. The undertaking was set on foot and carried through by the late Rev. STENTON EARDLEY, by whose zeal for the church and the Engadin the English church at Tamaden was also built, from the designs of Messrs. GEORGE & PETO. Mr. EARDLEY did not live to see his work completed.

YACHT, "CUHONA."\*

THIS luxuriously-fitted boat has just been completed for Sir ANDREW BARCLAY WALKER. The purely nautical part was designed by Mr. ST. CLARE J. BYRNE, of Liverpool, and all the internal arrangement of rooms and decorations were designed by Messrs. ERNEST GEORGE & PETO, who are also carrying out the works at Sir ANDREW WALKER's mansion at Gateacre Grange, near Liverpool. The principal saloon, 24 feet by 20 feet, is richly panelled with dark oak; the panels above dado line are carved in wood, and lacquered a dull gold colour, each panel being separated from its neighbour by a fluted and carved pilaster. The ceiling was painted by Mr. G. F. MALINS. A rich curtain divides this room at will into a drawing-room and dining-room, the side facing the former being of maize brocade, and the latter of stamped velvet. The sideboard, piano, writing-tables, chairs, &c., are all in keeping, every detail, down even to the wine-glasses, having been specially designed. The sofas are covered with antique Persian rugs. The state-rooms are all treated differently in decoration, the ladies' rooms having the upper parts covered with cretonnes, with walnut dados below, and the other rooms being panelled up to ceiling. The entrances to the berths are arched, and are hung with Japanese silk curtains. On deck are the chart-room and entrance lobby and boudoir. The lobby is panelled with solid rosewood up to ceiling, with a beautiful cabinet filled with old Rhodian china. Perhaps the most perfectly finished

of any portion of this boat is the boudoir, of which the lower portion is panelled with rosewood, and, above same, the walls are hung with *velours ciselé* in pale terra-cotta and maize colour. The ornaments in this room are all old carved ivory figures and old coloured Oriental porcelain. This yacht was built by Messrs. EARLE'S Shipbuilding Company, of Hull, who also did the work to state-rooms; but the beautiful panelling and cabinet-work we have been describing is from the shops of Messrs. HOWARD & SON, of Berners Street, W.

*Harrington Gardens.*—The bricks for these mansions have been supplied by Messrs. T. LAWRENCE & SON. The facing bricks were No. 4 pressed, and the moulded work No. 9 rubbers.

## INDUSTRIAL ART SCHOOLS.

A PAPER was read by Mr. R. W. Edis, F.S.A., at Huddersfield, on Tuesday, entitled, "How can a School of Art, as applied to Textile and other Manufactures, be best supported and utilised, with a view of meeting Foreign Competition?" Mr. Edis said: In promoting some schools for the improvement of art and technical knowledge applied specially to textile fabrics, with which Huddersfield and the district are particularly associated, it seems to me essential that the art teaching of your school should be associated with practical or technical teaching in its largest sense, and with the special object of elevating the defined branches of industry from which the workers of both sexes more especially obtain their livelihood. A competent and sufficient staff of teachers, who shall devote their whole time to the work before them, should start on a basis entirely different to that promoted generally in the present schools of art. A proper programme of preliminary and advanced teaching, theoretical and technical, should be insisted upon, somewhat similar to that carried out in weaving schools at Verriers, Mulhouse, Crefeld, Ghent, Rouen, and numerous other places. That after the first preliminary course of drawing the students should be taught freehand from natural flowers and objects as far as possible, and to arrange the grouping of natural objects conventionally or naturally in design for various tissues; competent masters should be engaged capable of teaching not only the theory but the practice of weaving, dyeing, and chemistry as applied to various colours, their fixity and durability, with short practical lectures showing by experiments the different arrangements of colours, and pointing out the various combinations and differences effected by the placing in juxtaposition of various colours. The art teaching should be by progressive stages. The technical instructor should teach the students how to apply to practice and to utilise the scientific and artistic knowledge derived from the teaching in the classes for drawing and design. Dexterity of hand, with a habit of rapidity of practical execution, should be sought for rather than the stippling and excess of shading which is now generally taught. The pupils should be taught in a common sense manner—each professor or teacher should endeavour to adapt his teaching to the capacity of the pupils; he should strive to place under the eye of the pupil the objects of which he is speaking, and to satisfy himself by frequent questions that his pupils have understood him. The progressive advanced course should include the elements of industrial mechanics and of chemistry, with special reference to its application to local industry; the various processes of weaving, and all connected with it; the theories of tissues, their classification, manufacture, composition, and analysis; the theory of colours, their contrasts and combinations; ornamental design, comprising the drawing of flowers from nature; the composition of groups of ornaments and flowers, and other natural objects applied to textile fabrics of all kinds, together with instruction needful for their application to the looms, and general industrial design. As far as practicable, foremen of the principal factories should be induced to ally themselves with you, and be paid for short courses of simple lectures; or, still better, conversational discussions, aided by practical teaching with materials, setting forth all the preliminary operations of weaving, such as winding the bobbins, preparing and mounting and rolling up the warp; of the various apparatus, &c., employed in these operations for hand and power-loom weaving—the preparation of the weft, winding, dressing, &c.—of the setting of patterns, and of general weaving. The pupils should then be taught to set their own designs and to practise themselves in the technical work under the foreman or teacher, and explanation should be given in every branch in a systematic manner in all the operations connected with weaving, from the design to its execution on the loom, and, if possible, this teaching should be assisted by periodical visits to the various factories where the work could be explained in a more practical way. The pupils should also be taught to analyse and reproduce themselves, in woven fabrics, all kinds of specimens of stuffs, from the most simple to the most complicated, and thus to acquire a thorough artistic and technical knowledge of

\* See *The Architect*, October 6.



everything relating to the production of textile fabrics. I believe such a system as this, as practically carried out in the school of Ghent, would lead to the vast improvement of all textile work, and the pupils thus trained would naturally find employment in the factories at remunerative wages, and the improvement in all work would, I believe, tend materially to improve the trade of the district and to satisfactorily meet foreign competition. Attached to each school should be a well-selected library of works pertaining to ornamental and other design, together with all the best works on applied sciences, and periodical publications illustrating the various inventions and artistic designs of other countries, which such people as might be recommended by the teachers should be allowed to have on loan for a certain period. If this could not be arranged, the library should be made free to all, and pupils encouraged to use and study in it, while occasional short lectures might be given on special subjects, made as interesting as possible by drawings on the blackboard, or with examples borrowed or provided for illustration. Interest the students by every means in your power. Point out to them in an intelligent manner the difference between good and bad ornament. Show them how to group different forms, to make various combinations. Teach them harmonies of colouring, and exemplify this teaching by surrounding them as much as possible with good specimens of textile fabrics. Have beautiful things about them, for remember if you surround your workers with all that is mean, hideous, and commonplace in design, no teaching in the world will be of any lasting service. It seems to me that the question of the proper support and keeping up of these special schools, in which the artistic and technical teaching should be made especially applicable to the particular trade of the district, is one in which each municipality or local district authority should have a special interest, and that they should be directly supported by the district quite as much as the preliminary or Board schools; for surely it is as much a matter of interest, from a purely commercial point of view, that our workmen and workwomen should receive an education fitting for the carrying out of the trades of the country, and to meet the ever-increasing improvement in artistic and scientific productions throughout the world, and to hold their own against the art industries of other nations, as to insist on a general compulsory primary education of the children of the masses. The promotion of a system of what I may call industrial education, which shall best enable the individual to follow his or her particular trade with advantage to the State and profit to the individual, is surely one which demands State recognition as much as primary education in reading, writing, and casting up accounts, as each district is likely to reap the benefits directly of improvement in its particular trade, by improved education of the workers, and through them of the higher artistic and commercial value, whether directly by higher price or by increased demand. Each district should pay a proportion of the charges for that educational system by which it will particularly reap the profit and advantage. It is unfair, however, that the State should leave the whole cost of this education to the town or district; in all other countries the educational system is properly organised and supported by the State and various local authorities as being of paramount importance to the manufacturing interests of their respective countries. Why should not a similar State education, assisted by local subsidies, be organised and supported in this country?

Mr. G. Marchetti also read a paper on the same question. The author said we must not regard what we have done as being sufficient for at least our own generation, but rather as an incentive to press forward and do more. This can be accomplished in great measure by our schools of art; but, to render them efficient and popular, we must help and patronise them to the utmost of our ability. We must urge the young to attend them, we must all of us do our best in every way to enable them to multiply and prosper. It is therefore necessary that schools of art be supplied with every means for ensuring the successful training of students, and for enabling them to acquire that experience that is necessary for keeping at least abreast with their Continental brothers. Manufacturers and merchants should, however, not lose sight of the fact that, in supporting schools of art, they further to a great extent their own interests. No success can be obtained by the former if English manufacturers do not possess the required artistic value, and such value cannot be arrived at unless we support those schools where art is taught.

Mr. Clay, sen., denied that English art was behind Continental art. Frequently in the manufacture of trousers, he said, local men led the trade in regard to design, and French makers often came to this country and either purchased our designs or copied them.

Mr. Whiteley Ward said he had been engaged until within a few years past in carpet-making, and so far as his experience was concerned English carpet designs were generally as good as and oftentimes better than those he had seen on the Continent. The question between home and foreign manufacture was simply one of price, the foreigners being enabled, by means of cheap labour and working longer hours, to undersell home manufacturers. The London market was generally flooded with Continental goods, but they were invariably of a low order as regarded quality, and were inferior in design. In most respects, however, our foreign com-

petitors had the same advantages that we possessed; they had machinery similar to home manufacturers, and they bought their raw material at the same rate.

Mr. Stopford said that when he went to Halifax some years ago he found that nearly all the best positions in the designing departments were filled by foreigners. Matters, however, had since been reversed, and as the result of art teaching Englishmen now occupied these appointments. He could not understand how it was that we spent enormous sums of money in the erection of palatial buildings for the purposes of elementary education, while technical instruction was left to the benevolence of the country.

Mr. Rathbone said that the promoters of schools of art addressed themselves to the wrong side of the question. He feared they were now bringing out a lot of second-rate artists, instead of a number of first-class designers.

Mr. J. W. Davis said that some of the employers in Halifax obtained their designs from France, either directly or indirectly. The primary question was how a good art school could be established, and next how it could be supported.

Mr. Cockram said that designs purchased outside the home manufactory were very often of no service, for frequently the whole of the details in them had to undergo recomposition. Our fabrics were, as a whole, superior to those of Continental make, but we could not beat Continental manufactures in the market because of prohibitory tariffs and the cheap materials of which their fabrics were composed.

### MOSAIC WORK AT AIX-LES-BAINS.

THE committee of the Casino at Aix-les-Bains have exhibited to the public a fine piece of mosaic work executed by Dr. Salviati, of Venice, viz., the decoration of the large cupola in the grand hall. It is one of the most extensive mosaic decorations of modern times, covering an area of 3,500 square feet. The work has been executed under the superintendence of the architect, M. A. Boudier, after a cartoon by M. Lameire, in the short time of six months.

The ceiling is divided into a large central cupola surrounded by four smaller ones below it. The subjects represent symbolical signs of the zodiac and of the four seasons, and the details of each subject are plainly visible without interfering in the least with the elaborate ground which they seem to be placed over. Upon the shield which each figure holds are written the names of the architect, painter, and mosaicist. The four elements are represented in the four small cupolas by boys mounted on various symbolical animals. Different shades of gold and many new tints representing various precious stones are introduced, giving to the *tout ensemble* an effect which is compared to a graceful work of lace interspersed with gold and gems. Dr. Salviati declares that he has never had so favourable an opportunity of making a display of all the resources of the mosaic art. H.R.H. Princess Beatrice of England, with her suite, and many distinguished personages were present at the opening ceremony, and honoured Dr. Salviati with their warm congratulations upon his splendid work.

### THE LATE MR. ROBERT GAVIN, R.S.A.

ANOTHER Scottish Academician, says the *Scotsman*, has been removed by the death of Mr. Robert Gavin, which took place on Friday evening, the 5th inst., at his residence, Cherry Bank, Newhaven. For the past three years Mr. Gavin had been in delicate health; but, though he has had frequent illnesses during the present year, his condition did not assume a serious aspect until shortly before his death, the cause of which was weakened action of the heart, probably induced by an attack of rheumatic fever in youth. The second son of the late Mr. Peter Gavin, merchant, Leith, the late academician was born in that town in 1827; and was educated at the Leith High School. He early manifested a taste for art; and when about twenty-one years of age, he entered the School of Design under the late Mr. Thomas Duncan, and had as his fellow-students Sir William Fettes Douglas, Mr. Thomas Faed, Mr. Alexander Fraser, and other artists who have risen to eminence. Devoting his entire attention to the development of his talent, he painted a large number of fancy pictures which became very popular, and were eagerly bought up by a London dealer. His earlier works were regarded as partaking a good deal of the style of the late Sir George Harvey, and were characterised by good colour and broad painting. A few of his more attractive productions were engraved in chromo-lithograph, and in this form attained a large sale. His *Reaping Girl* and *Phoebe Mayflower*, for example, were well known and generally admired. In 1855 Mr. Gavin was elected an associate of the Royal Scottish Academy. Some three years later, having apparently become a little dissatisfied with his progress in art, he entered into partnership with a wine merchant, but he only continued his business connection for about a year, and then returned to the more congenial work of the studio. Fully ten years ago he made a tour in America, where he prosecuted



his art with zest, painting several pictures in which appeared negroes and other figures met with in his travels. He then returned home, and after a short stay proceeded to the Continent, and finally settled at Tangier, in Morocco, where he painted numerous Moorish subjects. Returning to this country three years ago, he was elected an academician, and produced as his diploma picture *A Moorish Maiden's First Love*, which represents an Eastern damsel caressing a beautiful white horse. Latterly, his works have been mostly reproductions of oriental studies; and although they have shown a tendency to become mannered in subject, as well as somewhat heavy in colour and leathery in texture, they have never failed to find numerous admirers. The deceased artist, who had attained his fifty-sixth year, was unmarried.

#### NORTHERN ARCHITECTURAL ASSOCIATION.

THE annual meeting of members of the Northern Architectural Association was held on Tuesday, in the library of the Castle, Newcastle, under the presidency of Mr. J. Tillman, Sunderland. The hon. secretary (Mr. W. H. Dunn) read the annual report of the committee, which reminded the members that the association had now reached its silver wedding, it being twenty-five years since the members joined hands together for the elevation of the profession and the establishment of a uniformity of practice. The attention of the association was called to the action of the governors of the North-Eastern Counties School. It appeared that in the proposed erection of a large block of buildings at Barnard Castle, notwithstanding that the money had been collected from the counties of Northumberland and Durham and the North Riding, only three architects had been selected to compete, viz., Mr. R. J. Johnson, Newcastle; Mr. Armfield, Whitby; and Messrs. Giles & Gough, London. Some correspondence took place, but the governors would not extend the competition. The following resolution was adopted: "This association regrets that a more open competition to the practising members of the profession in the three counties had not been adopted." At the quarterly meeting held in February the general rules of the Royal Institute relating to competitions were adopted by this association, and 500 copies were printed. A copy was sent to each member of the city council with a request that they would adopt the same for future architectural works. Two public buildings had since been submitted by the corporation to competition, viz.: Police barracks and fire brigade station in Westgate Road, and infectious hospital at Heaton, wherein the general regulations were adopted. In conclusion the committee drew attention to a subject which was some years ago discussed by the association, viz., the offering of a medal to articulated pupils in the offices belonging to members for measured drawings of old buildings. It would not only give an interesting impetus to the pupils in studying the many rich architectural remains that existed in the neighbourhood, and for which the counties of Northumberland and Durham were so famous, but also tend to give the association a more practical and beneficial character to the younger members. The financial statement made up to December 31, 1882, showed a balance in favour of the society of 12*l.* 18*s.* 8*d.* On the motion of Mr. Oswald, seconded by Mr. F. W. Rich, the report was adopted. Subsequently Mr. F. W. Rich was appointed president; Mr. W. H. Dunn, vice-president; Mr. T. Oliver, hon. sec.; and Mr. W. L. Newcombe, treasurer.

#### ROMAN LANCASHIRE.

AN address was delivered by Professor Boyd Dawkins at the first ordinary meeting, on the 5th inst., of the Lancashire and Cheshire Antiquarian Society. The president said he had thought it desirable to put before them what he took to be the especial work of that society, which really and mainly consisted in collecting local materials for history. They had to look around upon the district of which they were the centre, and of which they were living in the natural capital, and see what they could do in the way of reconstructing the old history of that part of the world—a history which all would admit to be at present exceedingly imperfectly known. They knew that from documentary evidence very little was known about the Roman occupation of this country, but day by day, and year by year, isolated explorations here and there, the work of the pickaxe and shovel, were revealing the true nature of that occupation. From the beginning of the fifth century down to the close of the sixth—speaking in round numbers from the year 400 to something like A.D. 650—we knew scarcely anything, and he wished to point out how discoveries, some of which had been made in this very district, when brought into relation with other discoveries, had thrown considerable light upon those dark times. Professor Dawkins proceeded to explain how discoveries which had been made in caves at Buxton, Settle, and elsewhere of articles of domestic use, weapons, coins, and ornaments, together with the remains of domestic and wild animals, fragments of charcoal, &c., furnished evidence that the caves were inhabited by a fugitive people, who were proved to be Roman from the fact that

similar remains were discovered in the Roman villas and towns. The Roman civilisation of Britain was, he said, one of exceedingly high character. When they conquered this country they introduced their language, their arts, their literature, their system of agriculture, and they also introduced their roads. Just as Englishmen were the great railway makers of the world, so the Romans were the great road makers of the world. A great deal of the well-being of this country was due to the Roman roads, for they had remained ever since the great arterial lines of communication. Under the Romans the people were practically reduced to the condition of slavery, but in course of time came retribution. About the close of the fourth century the Germanic tribes made their way across the Rhine, poured into Gaul, and fought their way steadily southward and eastward, causing what had been termed a wedge of heathenism between the Roman province of Britain and the governing centre of Rome. Later, the last Roman legions garrisoned in this country were recalled, and we soon had a picture of a country which was formerly united under the strong hand of the Roman, divided into a series of weak communities, warring more or less with one another. Therein lay the great cause of the destruction of Roman civilisation. Professor Dawkins proceeded to show how the Picts and Scots, the Angle and the Saxon, assisted in the work of exterminating the power and civilisation of the Romans in Britain, and pointed out, in opposition to the theory of some that the Romans were all destroyed, that numerous ethnological and physiological evidences existed that the characteristics of the Roman people were to be found amongst us at the present day.

On Saturday a party of the members visited the Roman Road at Blackstone Edge. A part of the road was exposed showing the central line of stones, both where it is a deep and well-defined groove and where it is even with the rest of the pavement. On the eastern slope of the hill, where the pavement is called the "devil's stones," a section of some thirty or forty yards in length of the pavement was found to have been very recently removed, and the stones applied to repairing a watercourse. The question was raised whether these ancient remains were not of sufficient value to merit protection under Sir John Lubbock's Act.

#### WINCKELMANN.

AN introductory lecture to the session of 1883-84 was delivered by Dr. Karl Dammann at the Mason College, Birmingham. The subject was the life of Johann Joachim Winckelmann. Dr. Dammann pointed out that among the agencies which affected the German mind during the reign of Frederick the Great, and which brought about the great regeneration of German literature, were especially four: The personal character and influence of Frederick himself; the liberal ideas spread by the writings of Jean Jacques Rousseau; the study of Shakespeare, opened to the German people by Wieland; and the insight gained into the Greek mind, and especially to Greek art, by the labours of Winckelmann. Without Frederick, a Lessing would hardly have been possible; without Winckelmann, Lessing could not have produced his *Laokoon*; without Lessing and Winckelmann, we cannot conceive a Goethe such as he was. Johann Joachim Winckelmann was the only child of a poor shoemaker of Stendal, in the Altmark, Prussia, born December 9, 1717, and was assassinated at Trieste June 8, 1768. His early struggles through poverty and want were truly great. But the young student was filled with an insatiable thirst after learning, and especially sought for an introduction to a world of beauty, which there was no one to open to him, the entrance to which he must conquer, step by step, by his own effort. He worked hard at the grammar-school of Stendal, and especially devoted himself to the study of Greek. Then he went to the Kölnische Gymnasium of Berlin, and afterwards matriculated at the University of Halle, in his twenty-first year. His poverty was so great as to oblige him to give private lessons, in order to enable him to live during his years of study. At last he was appointed librarian to the Reichsgraf von Büna, in Nöthenitz, on the Elbe. This brought him to Dresden, and introduced him to those friends and patrons who afterwards gave him the funds to visit Rome, and to study quietly there those art treasures which he had dreamed about during so many years. The King of Saxony and his brother were his true friends; and in Dresden he became acquainted with the chief artists of their age. In his thirty-eighth year he gave the world his first essay, "On the Imitation of Greek Art in Painting and Statuary;" and by eloquent words he endeavoured to break the spell which till then had blinded the minds of the world against the true meaning of antique art, whose image, in its simple, restful beauty, rises supremely over all the pretty conceits of the Rococo period. The king, on reading his treatise, said, "This fish shall have his proper water," and allowed him a pension to study antique art in Rome itself. There, truly, Winckelmann was in his own sphere at last; and after mastering all the treasures of ancient art, especially Greek art, he began to write his great work, "The History of Ancient Arts," which immediately rivetted the attention of the great minds of his age, and by which he produced an entire change in the conception of art for all future times. The rich



inheritance which he has left the world consists not only in the framework of the new science thus raised up by his labours and researches, but also in the example of his own life, which not only allowed him to behold and understand the true and beautiful in ancient art, but enabled him to give an educational force to the spirit of art, which penetrates beyond the world of form and colour, and reaches the creative mind and the soul-inspiring idea, the very nature of which lies in beautiful form, pure action, and truthful thought. In 1772 Winckelmann's bust was placed in the Pantheon at Rome, and a bronze statue in his native town; and Goethe, in his celebrated essay, advised the immediate publication of Winckelmann's complete works, exhorting the world to celebrate from time to time the memory of such men as Winckelmann, who have left us inexhaustible and imperishable legacies.

### THE GLASGOW MUNICIPAL BUILDINGS.

THE foundation-stone of the new municipal buildings, in Glasgow, was laid on Saturday by the Lord Provost. A banquet followed, at which "The Architect and Contractors" was proposed by Sir James Bain.

Mr. Young, in replying, expressed his thanks for the kindness he had always received from the lord provost, the magistrates, and members of council, and the city officials generally. He desired specially to thank Mr. Carrick, their eminent and worthy city architect, to whom he was indebted for the general scheme of the plan of the new buildings, besides many valuable suggestions. It was now twenty years since he left Glasgow with the object of trying to forge his way in the great metropolis of the south. At that time and at the present moment he could wish for no success which he would prize so highly as to return to Glasgow with a wider and more matured experience, and to have the privilege and the honour of taking a part in carrying out one of the many great works for which their city was distinguished.

Councillor Laing proposed "The Referees in the Designs Competition." It had given the corporation of Glasgow very great pleasure indeed to have been honoured that day with the presence of Mr. Barry to witness the ceremony of laying the foundation-stone of their municipal buildings. When the building committee met to consider the selection of a gentleman to act as referee in the matter, it gave them no little concern, as their great anxiety was to find one not only acceptable to themselves, but one who would command the confidence of every competitor. Amongst others, Mr. Barry's name was mentioned and unanimously accepted; and when they received his reply, agreeing to their request, they felt relieved and thoroughly satisfied that the selection was safe in his hands. Mr. Barry stood pre-eminent in his profession as an architect, as a man of business, and as a sound adviser. Mr. Carrick, Mr. Barry's co-referee, was a gentleman known to and esteemed by them all, and by none more than by the corporation itself. They knew his great value to them as their city architect, as their burgh engineer, and as their general adviser in all matters, and had the most implicit confidence in him. When he gave an opinion on a subject he was listened to with the greatest attention, and his suggestions invariably acted upon. Mr. Carrick, during his long public career, had oftentimes had very difficult and delicate duties to perform on behalf of the corporation, but these he had performed to the satisfaction of all. Mr. Carrick was well known not only in Glasgow and the various burghs in Scotland, but his opinion and advice was often sought and freely given to corporations both in England and Ireland. He had now been upwards of forty years in Glasgow acting as burgh engineer, and during all that time had had the modelling of the city very much in his own hands. Many, very many, were the improvements he had carried out; and were he to publish a history of the city as it was when he began his labours—the improvements effected, and the necessity which existed for these improvements—it would be of great use to future town councils. The municipal buildings would not be complete, unless they had Mr. Carrick's statue in front of them in George Square; but it was to be hoped that he would long be spared to adorn the profession in which he held so high a position.

Mr. Barry replied. He took occasion to refer to the importance of the work which had been done that day, and mentioned that the competition which had taken place among the architects had resulted in the city of Glasgow obtaining a magnificent pile of municipal buildings. The system which had been adopted by the town council of Glasgow in instituting the competition had up to that time been unknown. The conditions were carefully considered by the lord provost and the town council, with such assistance as Mr. Carrick and himself could give them, with the object of securing the best result for the public, and of being entirely fair to those who were asked to compete. It would be some little satisfaction to the lord provost and the council to know that the conditions of the competition, which had resulted in the ceremony of that day, had become more or less a model throughout the kingdom. The Royal Institute of British Architects, of which he had the honour to be a member, had adopted them as their model, and the Government, in the erection of new

offices which were now proposed, had adopted them in part. He had little hesitation in saying that they would yet come to be almost universally adopted. That, he thought, was a matter of very great satisfaction to the town council of Glasgow.

### ARAB ART IN EGYPT.

A REPORT has been prepared for the Society for the Protection of Ancient Buildings upon the measures adopted by the Government of Egypt for the preservation of monuments of Arab art in that country. The report states that on December 18, 1881, a decree was signed by the Khedive instituting a committee composed of high officials, under the presidency of Mohammed Zeki Pasha, Minister of the Wakûf, with a view to the preservation of those monuments. The duties of the committee were—(1) to make an inventory of the Arab monuments in Egypt possessed of artistic or historic interest; (2) to watch over their maintenance; (3) to see to the execution of proper repairs; and (4) to insure the preservation in the archives of the Ministry of Wakfs of plans of all work executed, and to indicate to that Ministry the fragments of monuments which ought to be transferred to the National Museum. The first meeting of the committee was held on February 1, 1882; but, owing to the disturbed state of the country, there was no second meeting until December 16, 1882. At the first meeting two sub-committees were appointed to carry out the objects in view. As a result of the labours of the first sub-committee, a list, dated June 9, 1883, has been made, comprising 664 monuments, consisting of mosques, tombs, drinking-fountains, and schools, all situated in Cairo and the neighbourhood. This list includes monuments of world-wide celebrity, such as the mosques of Amru, of Tulun Al Azhar, of Al Hakim, Sultan Hassan, and Al Ghuri, but does not omit small and obscure buildings of more or less modern date and of wholly subordinate interest. The report, however, mentions several monuments of much interest not included in the list, such as the four ancient gates, the Bab Zuweyleh, Bab en Nasr, Bab el Futuh, and Bab esh Sharieh; the remains of the ancient crenellated walls built by Saladin; the building used for the Makamah or Kadi's court, a beautiful and invaluable specimen of Arab mediæval domestic architecture, and many others. The report also points out that the tomb mosques of the Malik al Ashraf Inal, and of the Amri Yusuf, forming part of the tombs of the caliphs, are used as powder magazines, to their own imminent danger, and that of the remarkable and invaluable monuments in their immediate neighbourhood. The second sub-committee has addressed five written reports to the general committee, the last dated May 14, 1883. These reports are stated to be exceedingly interesting, and show that valuable service has been already rendered.

### STREET PAVEMENTS.

A MEETING of municipal and sanitary engineers was held lately in Carlisle, when Mr. McKie, the city surveyor, read a paper on "Tar Macadam and Concrete Macadam Pavement for Roadways, and Tar Pavement and Cement Pavement for Footways." The author said that, taking the cost of other things into consideration, he did not recommend concrete macadam for street formation. With regard to tar macadam for carriage-ways and footways, he thought the full consideration of the subject well worthy of attention.

Mr. Gordon, of Leicester, said tar paving was all very well in the quiet quarters of a large town, and he thought it would be very good for a place like Carlisle, where there was not much traffic, but they had to guard against the excessive use of it. The great point in favour of tar pavements was their noiselessness. They called it in Leicester the "silent macadam"; it was softer than even asphalt or wood paving, because there was an elasticity about it, and it gave a certain spring to the road. This pavement was in great demand in Leicester for those streets in which doctors, solicitors, architects, &c., resided, and they had now many thousand yards of it laid down. The cost of tar macadam for roadways was from 2s. 5d. to 3s. 0½d. per square yard, and that did not include the cost of forming the foundation, but this they had only found to cost about 4d. per yard, so that the cost per square yard might be taken at 3s. 4d., including the foundation. Recently a very good artificial asphalt had been devised at a cost of 3s. 4d. to 3s. 6d. per yard, which had just the same appearance as real asphalt, and would last equally as well. The advantages he should claim in favour of tar macadam were these: it was less noisy, less dusty, and cost less to cleanse it. It was an improved form of macadam roadway, and they must not lose sight of that; while the cost of repairing tar macadam would be found to be much less than ordinary macadam, even on the heaviest roadways. He strongly approved of the system of wood paving introduced recently into Norwich. The borough surveyor there, Mr. Marshall, had had the courage to adopt an entirely new system of wood pavement. He had tried the plan of sawing ordinary Memel



planks up into blocks and placing them like ordinary paving cubes on a gravel foundation. And he had succeeded in carrying out that work at prices ranging from 5s. 8d. to 7s. 7½d. per square yard, and during the past few years over 70,000 yards of this pavement had been put down, and had been found to answer admirably. He himself had gone over the city and found that the work which had been laid down three years did not seem any worse than that which had been down twelve months, while the council had petitions in all directions to extend it. He did not think this Norwich wood pavement was sufficiently known. If it were they would hear less of the elaborate systems in London and other towns. Mr. Marshall had told him that they had actually saved 1,000% a year in the cleansing of the streets. They were much better satisfied than they were before. When the blocks were worn away on one side, Mr. Marshall proposed to turn them upside down, and so form what might be called a new street with the old material.

Mr. Laws said they had tried it for one or two years in Newcastle, but only on the most expensive system they could adopt, and it did not answer well. He had noticed in London that when blocks were taken up they seemed completely knocked to pieces. In Newcastle they had tried the experiment of scattering small gravel on the wood pavements. It was at once forced into the wood, and for months they had never seen the surface of the road, while the horses got a firm footing.

### SIENESE INLAYING.

A REPORT has been prepared by Consul-General Colnaghi on the trade and commerce of the province of Siena. In describing the present condition of the industrial arts the author says: The celebrated marble pavement of the Duomo of Siena was commenced in the fourteenth century, the patterns being originally indicated in simple outlines *a graffio*. In process of time the work was perfected by Beccafumi in the first half of the sixteenth century, the pavement being inlaid with marbles of various colours in chiaroscuro. The constant need of restoration has made this art hereditary among Sienese artists, and, at the present day, it is well carried out, not only as regards the repairs of old work, but in new compositions. In the workshops of the "Opera del Duomo," or Cathedral Board of Works, the artists employed are allowed to execute private orders on their own account. The works at the cathedral are being actively carried on, owing to a legacy left by a late rector, under the superintendence of the present administrator, Cavaliere Rubini. Of late years the whole pavement of the Duomo has been restored, and large figure pieces have, in addition, been executed after the designs of Professor A. Franchi, with ornaments by Signor L. Maccari.

This marble inlaying, as carried out at Siena, is peculiar to the city. It is executed with large or small pieces of marble, as the design may require, which are then outlined *a graffio*, the lines being filled in with a resinous composition. The backgrounds are formed of white marble. To carry out the compositions, grey, red, green, and yellow marbles, in various gradations of tint, are employed. The marbles used are all quarried in the provinces of Siena and Grosseto. The architect of the Opera del Duomo is the Cavaliere Partini; the director of the sculpture the Cavaliere Sarocchi, a pupil of the late Professor Dupré. Signor L. Maccari, with four apprentices under him, superintends the ornamental work. A foreman stonemason with seven, and a foreman mason with five workmen, complete the ordinary staff of the Opera, other hands being taken on temporarily, as occasion requires. All kinds of work are executed, including Roman and Venetian mosaics, the first materials for which are procured from Rome and Venice. M. L. Maccari has also a private workshop of his own, employing two sculptors, two stonemasons, and two polishers. He works on commission, and keeps in stock fireplaces, small columns, tazze, &c., for sale at moderate prices. A similar establishment is possessed by the Fratelli Mazzini.

The same causes which made the school of decorative sculpture in Siena famous have acted on that of wood-carving, of which Antonio Barili, who worked at the end of the fifteenth century, is the most celebrated representative. Two styles of wood-carving are practised in Siena—the one highly-finished work of great delicacy and beauty, which is employed for frames or furniture of the highest class, and which, from the time it takes to execute, must necessarily be expensive; the second, which may be termed commercial, though in its way equally artistic with the first, is bolder and less finished, struck out for effect, and allowing commissions to be taken on a large scale for decorative purposes at moderate prices. The style of carving in vogue is, generally, in imitation of fifteenth and sixteenth-century work, but the imitation is by no means servile, nor does it exclude original design. The principal wood-carvers of Siena are Signori Guidi, Gosi, and Querci, who are admired for the delicacy of their work; Cavaliere A. Rossi, Signor A. Lavagnini (who also sells furniture), Signor Barbetti (who gives employment to some thirty hands), and Signor Carlo Cambi.

Signor Cambi has in permanent employ 25 hands (15 carvers and 10 carpenters), whose numbers are more than doubled in case of need. The wages paid vary from 2 lire and 3 lire to 6 lire and 7 lire, and 10 lire for artistic wood-carvers per diem. From the end of 1880 to the beginning of 1882 Signor Cambi received orders from Messrs. Caird, of Greenock, for wainscoting, in carved wood, the saloons of four vessels built by the firm for the Peninsular and Oriental Steamship Company. The fittings are entirely in walnut, the carvings varied and tasteful, and the whole work effective and executed at moderate prices. The contract was, I understand, carried out to the entire satisfaction of Messrs. Caird. Signor Cambi has received commissions from England and elsewhere for carved furniture of various descriptions, and he has also worked at the British Embassy in Rome.

In the art of inlaying in wood the Cavaliere A. Rossi has succeeded in imitating the antique, having taken for his model an old door in the Palazzo Pubblico, which was inlaid with various geometrical figures. Inlays in wood and ivory are well executed in Siena by Signor Rossi, mentioned above, and by Signori Barni, Corsi, A. Lavagnini, Guidi, Gosi, and Querci. It is to be regretted that the works of these artists often remain on hand for want of purchasers.

### UNIVERSITY COLLEGE, DUNDEE.

THE new University College, Dundee, was opened on the 5th inst., and is an important addition to the educational establishments of the North. The existence of the college is due to the liberality of Miss Baxter and the late Dr. John Baxter, who contributed about 150,000*l.* for that purpose. It will be essentially an industrial college (having, however, professorships of classics and English), and the arrangements for the science classes are remarkably complete. The site selected is on the Nethergate, and has an area of about three acres. Upon the ground were four dwelling-houses and a church. The latter is to be the college hall, and the houses have been transformed so as to form commodious class-rooms. They are connected by a corridor, which is 165 feet in length and 10 feet wide. At the back a large chemical laboratory has been erected. The following description of the science department has been prepared by Mr. David MacLaren, the architect:—

#### Mathematics and Natural Philosophy Department.

The department of mathematics and natural philosophy has allotted to it House No. 2, which affords two laboratories, special rooms for optical and spectroscopic work, and battery stores. Additions have also been made in the form of a handsome lecture theatre, a preparation-room, and a photographic-room. The whole department is lighted by the electric light by means of Swan's incandescence 20-candle power lamps, which are so arranged that any portion can be separately illuminated. The electricity is supplied by a Siemens' shunt-dynamo machine driven by a 6 horse-power Otto & Crossley's gas engine.

One of the most prominent features in the laboratories is the remarkable facility given for experimental work in electricity. Leading wires carry the main current through all the larger rooms, while along the walls at suitable intervals are switches arranged for diverting the whole or portion of the current in any required direction; while besides the leading wires from the dynamo machine special sets of wires, to be used separately or simultaneously, are carried from the battery stores and from the accumulators beneath to the lecture-table, the laboratories, and the preparation-room.

If we take the department in order, we must first notice the cellars, where batteries are kept in special chambers supplied with flues for allowing any gases to escape from the building, and thus avoiding injury to the costly and delicate apparatus in the rooms above.

On the ground floor we find Laboratory No. 1—a room specially arranged for experiments requiring great steadiness and freedom from vibration. These are secured by means of stone tables (one of which, for large experiments and class demonstrations, measures 6 feet by 4) averaging 4 feet by 2, and raised from solid stone foundations, so arranged as not to be in contact with the floor. There are also two stone pillars extending from floor to ceiling, half embedded in the wall; these are for use in measuring the extension, torsion, and breaking strength of various wires, &c., and also for the arrangement of a cathetometer, that will be used in measuring heights to within the one-thousandth part of an inch. In this room will also be the dividing engine, an instrument used for graduating scales and thermometer tubes, and which will measure short lengths to within the ten-thousandth of an inch. Next to this laboratory is a small workshop, with blow-pipe, bench, and ordinary tools for small repairs, and for the use of students who join the practical class in order to make instruments for themselves. Next to this, again, is the professor's private room, containing some of the more delicate apparatus, amongst which may be mentioned a balance that will indicate the millionth part of the greatest load in either scale, and a polariscope second to but one in the kingdom. Opposite to this room, across the corridor, is the new lecture theatre, a handsome room seated for 100 students, and containing every convenience for lecture purposes. The table is



worthy of particular attention. It measures 15 feet 6 inches by 4 feet by 3 feet high, and is supported on a solid foundation free from contact with the floor, thus enabling it to be used for the most delicate operations as well as for lecture experiments.

There are pipes connected with it giving hot and cold water and gas, and also arrangements for exhausting the air from or blowing air into any place where it is needed; the former result being attained by a water-pump fixed in the panelling of the room. In front there is a tank, 8 feet long, with plate-glass sides and ends, intended for experiments in light, wave motion, and vortex motion. It is so arranged that the course of rays of light under water is distinctly visible, and the lessened effect of lenses in a denser medium rendered clear to the whole class. It can also be illuminated from behind. It is hidden from view when not in use by a series of fielded panels. Behind this there is ample room for keeping gas bags for oxygen or hydrogen. There are arrangements for supporting heavy models, &c., on iron pillars from the table, to which, as well as to the gas-pipes, water, &c., access is obtained by raising small covers, which lie when closed flush with the teak top of the table.

The electrical arrangements here are very interesting. Two long copper strips, bedded in paraffine and kept from dust by sliding pieces, run the whole length of the table; and in these holes are drilled, to admit of proper electric contact being made, by binding screws at any point on a moment's notice. These are again connected with switches that at once enable the lecturer to obtain at his table the whole current from the dynamo machine, or the current from Grove's cells in the battery store, or from any similar source in the preparation-room.

Above and behind the lecture-table are four large blackboards, diagram-frame, and case for lantern-screen; while at the very top of the room is a large Atwood's machine, giving a fall of 18 feet, which, it is hoped, will give results in the examination of the acceleration of gravity much superior to those obtained by the ordinary small instruments.

The room is lighted at the will of the lecturer by the light from one or both of two large sun-burners, one carrying twelve gas-burners, the other twelve incandescence lamps. Next to the lecture-room is the preparation-room, with suitable arrangements for preparing experiments. This room also contains a large diagram-case. Proceeding upstairs, we come to Laboratory No. 2, the larger of the two. Though it is generally considered a disadvantage for a laboratory to be anywhere except on the ground-floor, on account of the impossibility of otherwise procuring an isolated foundation for the tables, yet it is hoped that this arrangement here will secure freedom from vibration. They are supported on heavy stone brackets, built into the wall; they are eight in number, and two of them are the galvanometer stands. These last are of a somewhat novel kind. They consist each of two small slate slabs, strongly supported on stone brackets let into the wall, at a height of about 4 feet 6 inches and a distance of about 4 feet. One of these is to support the reflecting galvanometer or quadrant electrometer, with its delicate mirror suspended by a single thread of cocoon silk; the other is for the lamp and scale. By this means these delicate instruments are kept in one place, and never removed when once fixed there, while other necessary appliances, as shunts, keys, &c., are placed as wanted on the table below the stands. Next door is a room for specially accurate observations in light or electricity. It, as well as the laboratory and lecture-room, can be completely darkened. In it is a stone table with another pair of galvanometer stands, in which the high-resistance instrument invented by Sir W. Thomson will take up its permanent abode. In it, in a space not larger than the hand, are four coils of copper wire, silk-covered, making some 10,000 turns.

#### Engineering Department.

The engineering department occupies the eastmost house. The ground-floor, with the exception of an entrance lobby, is converted into one large and well-lighted room, forming the drawing-office. Here each student is provided with a separate drawing-table. Free use of the more expensive kinds of drawing apparatus is allowed by the college, and a collection of these is kept for the purpose; but each student is expected to provide at his own cost the more ordinary instruments of his craft. A store of these is kept in the office, from which students may purchase what they need at cost price. Upstairs is the lecture hall, a room of moderate size, but probably sufficient for the needs of the class; the professor's private room, and a room in which the surveying instruments are kept, which form the material for the summer operations of the engineering class. The collection comprises theodolites, levels, plane-tables, prismatic compasses, chains, staves, and all the usual implements of the civil engineer.

Going downstairs again, we enter the electrical engineering laboratory, a new building thrown out at the back of the house, and fitted with all the appliances required in practical electrical testing. A number of massive stone piers, built up from the ground and completely clear of the floor, serve as supports for the delicate galvanometers and electrometers, in the use of which a complete freedom from shaking is essential. Large tables standing on stone bases and stone slabs projecting from the walls carry other instruments. The apparatus includes a dynamo, motors, lamp, batteries,

resistance coils, magnetometers, electro-dynamometers, and all the electrical measuring instruments used in electric light engineering, in the transmission of power by electricity, and in telegraphy, both land and submarine. A large basement, extending under the whole house, forms a supplementary laboratory. One of the basement rooms is given over to electrical batteries, whose currents are carried to the laboratory above by a system of insulated conductors.

A set of thick copper aerial wires connects the Electrical Engineering Laboratory with the workshop, which is an isolated new building of two storeys standing a little way behind the college buildings. These wires bring over the strong currents afforded by a Siemens dynamo-electric machine, which stands in the workshop, and is driven by a 6 horse-power Otto gas engine. The same engine drives a row of shafting, from which a screw-cutting lathe and several other machine tools derive their power. An instrument-maker, a foot-lathe, a forge, and a considerable assortment of hand tools complete the equipment. The upper storey of the workshop forms a carpenter's shop and store.

The laboratory and workshop have been fitted up to enable Professor Ewing to give a special course of practical instruction in electrical engineering. This forms a novel feature in Scottish college teaching. In the workshop the services have been secured of a skilled mechanic, whose time will be divided between the Professors of Engineering and Natural Philosophy.

(To be continued.)

#### RUARDEAN CHURCH, GLOUCESTERSHIRE.

THE members of the Bristol and Gloucester Archaeological Society lately visited Ruardean Church, where the following paper was read by Sir John Maclean:—

Before entering the church I would call attention in the first instance to the figure over the door of the porch, which would seem to represent the head of the Blessed Virgin Mary, and more especially to the very remarkable sculpture in the tympanum over the south door. It appears to be of the date of about the middle of the twelfth century, and would seem to have some influence upon the date of the church. It is almost identical, as regards the treatment of the subject, with a sculpture in the tympanum over the door of Brinsop Church, in Herefordshire. That church is dedicated to St. George; but Ruardean Church is now understood, I believe, to be dedicated to St. John the Baptist, though this also probably in ancient times was dedicated to St. George. At all events the figure over this door is a representation of St. George, though some persons have supposed it to be that of St. Michael. Few will, however, upon a careful inspection, perceive that the flowing sculpture from the shoulder of the figure is not a wing but a mantle. The head-piece is of the form called Phrygian, and is exactly like that which appears on the monumental effigy of Geoffrey Plantagenet, Earl of Arigon, father of Henry II., and like those on the great seals of King Stephen and Henry II. The tunic and mantle also resemble those on the effigy of the said Geoffrey, who died in 1150. The tunic, you will observe, fits closely about the body, and is apparently belted at the waist, whilst the skirt is open at the side. Over this is the flowing mantle above mentioned, which is fastened in front by a brooch. The prick-spur has a recurved point without any neck. There is a *portraile* around the breast of the horse, and a high cantel to the saddle. The rude manner in which the drapery is treated by parallel lines is in conformity with several examples in Herefordshire. It is of Norman work. On entering the church you will find that it consists of chancel, nave, western tower, a south aisle, divided from the nave by an arcade of fine bays, and a large south porch. Let us look at these parts severally, but in the first instance it may be desirable to direct your attention to the arcade. It would seem to be of late transition Norman character, merging into Early English. The capitals of the columns are very peculiar, and have been evidently tampered with, but to what extent it is difficult to say. The columns would seem to be of fifty years later date than the south door, which would, therefore, indicate that the latter belonged to an earlier structure, but as the south wall has been entirely rebuilt we have no assistance from it in fixing the date of the aisle. The manor of Ruardyn at the earlier period at which I have found any evidence was held by the family of Alba Mara, or Albemarle. William de Alba Mara died seized of it in 1255. How long his ancestors had held it previously I know not, but I think at least for two or three descents. He died without issue, and his nieces, daughters, and his brother Robert Hathewy, and their issues, were found to be his heirs, and all of full age, except William, son of William Hathewy, by Agnes Albamaru, deceased, who was only eleven years old, among whom it fell into a partition of four parts. I am, therefore, inclined to conclude that the original church, and the extension indicated by the south aisle, were built by nine members of this family.

We will now proceed to the chancel, which I consider, so far as any of the original work remains, to be one of the Decorated period—say between 1300 and 1370. At this period the manor was held in coparceny by Thomas, son of Thomas Deverty,



Knt., and Annora de Albemarle, for whom the Bishop of Bath and Wells was guardian, and William Hathewy. In 1302 Robert Ving paid a fine of ten marks for his pardon, for acquiring from the Bishop of Bath and Wells the manor of Ruardyn without the king's license, and in 1305 Alexander de Bykenor paid a fine of 10*l.* for a like transgression in acquiring the same lands from Robert Ving; and in 1310 Edmund Langley sold to Geoffrey, son of Alexander de Bykenor, the manor of Ruardean. Alexander de Bykenor, who was a man of some consequence, treasurer for Ireland, had acquired a large share of the manor, and in the year last mentioned had license from the king to crenellate his mansion, or in other words, to castellate it. This was probably the origin of the castle remains which exist in the field adjoining the churchyard. It would seem to be probable that he re-edified the chancel, and that the Decorated founder's tomb in the south wall of the nave was prepared for him. This is now the most striking object in the church. I found it blocked up by a few rough boards, and the rector, at my request, has kindly opened it. There is only one other instance in which I have found any mention of the castle, and I may as well name it here and have done with it. When Joseph Baynham, of Westbury, in 9 James I., settled his estates on the marriage of his son and heir, Alexander Baynham, among the lands so settled he names the castle and manor of Ruardene. These Baynham were not those of Clowerwall, who afterwards held the Hathewys Manor in Ruardean, but the elder branch of the family. I might say much more relating to the manor, but this is not the time or place. Apologising for this digression, I will return to the chancel of the church. The east window is a modern insertion of Perpendicular character. The elegant window in the south wall is an original one, of the Decorated period, and of the date of the first quarter of the fourteenth century. A third of the lower part has been walled up. The north window is of Perpendicular date—perhaps 150 years later. In the south wall is a very pretty piscina. There does not seem to have ever been a chancel arch. The doorway to the rood-loft staircase remains, but the staircase itself has been walled up, though traces of it still exist. The roof is of Decorated date, and a good example. Of the founder's tomb in the nave I have already spoken. The north wall has been much pulled about, some of it rebuilt. The north door is walled up, and so are the ancient windows, and new ones inserted. The font deserves special notice, not from its beauty, but it bears the date of 1657, and I need not say that the erection of a font during the period of the Interregnum is a rare event. Possibly it was through the influence of John Vaughan, then lord of the manor, and a resident in the village, who, though a Roman Catholic, seems to have attended the church, for his pew remains at the foot of the pulpit-stairs, bearing his name and the date 1649, in December of which year he died, in the fifty-sixth year of his age, and without issue. He was grandson of Johanna, daughter and co-heir of Thomas Baynham, of Cloweswal, and wife of another John Vaughan. They were strict Romanists, and suffered greatly on account of their religion. Joan Vaughan in 1641, being then a widow, was arrested and committed to Gloucester gaol for affording shelter to a priest, then a capital offence. There is a tradition in the family that she was hanged, but I think that in consequence of the political disturbances of the period she escaped that fate.

The tower is of the Perpendicular period, and you will observe the very lofty and fine arch with continuous mouldings, which should connect it with the church, and which is now obstructed, not only by a singing gallery, but also by a false floor set in the tower for the purpose of making a vestry, concealing also the vaulting of the roof, which is deserving of notice. The singing gallery was erected by subscription of the inhabitants towards the end of the last century, upon the plea that there was not sufficient room in the chancel for the "company of singers," as it was called. The chancel, however, if properly arranged, would accommodate a large choir, and whenever the church is restored the whole of the erections I have mentioned will, I hope, be cleared away, the tower thrown open to the church, and the "company of singers" remitted to their proper place in the chancel.

There are six bells in the tower, all modern. The oldest was cast in 1705, and the others in 1866, when the Rev. John Burden, late rector of English Bicknor, and in many ways a great benefactor to this church and parish, with greater liberality and zeal than judgment, spent large sums upon the repair of the church. A great portion of the walls were rebuilt by him, and the upper portion of the elegant spire renewed. He is also responsible for the flimsy flying buttresses and pinnacles on the tower, and probably for re-making the font.

As a parish church this edifice has no history. From a very ancient date almost to the present day it continued a chapelry to the parish church of Walford, which we propose to visit presently and the vicar of Walford provided for the ministrations.

**A Memorial Bust of the late General Sir George Pomeroy Colley** has been fixed in the hall of the Staff College at Farnborough, of which institution he was a professor. The sculptor is Mr. H. P. McCarthy.



#### Non-poisonous Paints and Driers.

SIR,—Having for some time past watched with considerable interest the production of non-poisonous paints, and noticing the remarks made by two of the committee in connection with the Sanitary Institute of Great Britain, I think it only fair to the firms referred to that a better explanation should be given to the public with respect to the driers mentioned.

The firms mentioned manufacture and sell perfectly non-poisonous substitutes for white lead, thereby preventing the many diseases which arise from the latter pigment, alike to those who make it, those who use it, and those who are subjected to its ill effects after application.

They do make and supply a leadless drier, and strongly recommend its use with their patent whites; but as it is more expensive than the ordinary "patent drier," the decorator often prefers to use the cheaper article. The ordinary patent driers contain sugar of lead in proportion, say, of four ounces to eight pounds. We will, therefore, suppose that they prefer the latter. Eight pounds of driers is sufficient for one hundredweight of patent white. One hundredweight of this white will cover about 900 to 1,000 square yards. Now, what I want to know is, how those gentlemen make out that there is any danger in the use of three or four ounces of lead in such a space. It is perfectly true, quite apart from the sanitary aspect of the question, that the admixture of even this very small quantity of lead is objectionable, because it is sure to cause discoloration in time, in the presence of sulphuretted hydrogen and other gases; and the manufacturers urge this as one very strong reason for using the leadless driers with their pigment, in place of ordinary patent driers or terebine. The many tons of non-poisonous white that these firms are turning out daily tend to show how popular they have become, and how efficiently they prove a complete substitute for white lead.

Yours truly,

FRANK WILKINS, Decorator.

32 Fulham Road, South Kensington.

#### CHURCH BUILDING AND RESTORATION.

**Dundee.**—The new chapel in Hilltown was opened on Sunday, the 7th inst. It has been designed by Messrs. C. & L. Ower, architects, Dundee. The style is French Gothic. The principal front has a large gable, with lancet windows continued through two flats. Small pointed windows are in the top of the gable, which is finished with a stone cross. The long windows have drip mouldings resting on capitals, and shafts carried to the whole height of the windows, with capitals and moulded bases. The entrance doorway is moulded, and has shafts with moulded bosses and capitals. Carved bosses finish the drip mouldings of the doorway and the smaller windows. Over main doorway a tower is carried up, with a belfry. The tower forms a stair for access to the keeper's house and ringing chamber. On entering, a staircase on the right leads down to a hall for male teachers. On the left is the ladies' room, for Dorcas and other meetings. At the end of the entrance passage is the chapel, which will accommodate about 450 children. The schoolrooms are also connected with the chapel, and the accesses are provided with double doors, so that the noise from the schoolrooms may not interrupt the services. To take full advantage of the slope of the ground, the schoolrooms are approached from the level of the platform. A spacious platform has been erected at the west end of the chapel, and is approached by two stairways. The schools are separated by a sliding partition. The walls of the chapel and schoolrooms are decorated with appropriate texts, with coloured cornices and lines. An open wooden roof with ceiling lights has been adopted in preference to windows in the sides of the building, as it has been found that the noise from the street in similar buildings disturbed the work of teaching. The whole of the building, with the exception of the keeper's house, is to be heated by hot-water pipes.

**Bexley.**—The church of St. Mary has been reopened after restoration, which has been carried out from the designs and under the superintendence of Mr. Basil Champneys, architect, by Messrs. Bell, of Saffron Walden and Cambridge, Mr. Standing, of Bexley, being the clerk of works. Among the works were comprised the stripping of the roof and walls inside and out, the retiling of the roof, the restoration of the oak roof beams throughout, the insertion of panelled ceilings in chancel, nave, and aisle, the rebuilding of the east and north walls of the chancel, the restoration of all the tracery of the windows, the construction of two new east windows in the chancel and north aisle, in accordance with the original windows, the remains of which were found broken up and buried in the walls; the restoration of the original arcade of the sedilia, the removal of the galleries, the



closing of all graves or vaults beneath the church, covering of the entire floor with concrete, &c. Stained glass windows have been inserted in chancel and nave, and one of the windows, *The Kings*, represented by figures of David and Hezekiah, is given by Mrs. Spottiswoode, in memory of her husband, Mr. William Spottiswoode, late president of the Royal Society. The cost of the restoration has been upwards of 7,000*l*.

### SCHOOL BUILDINGS.

**Sheffield.**—The memorial-stones have been laid of new schools and class-rooms in connection with the Ebenezer Wesleyan chapel. The architect of the schools is Mr. C. Gibson, St. Philip's Road, Sheffield. Mr. J. White, Penistone Road, is entrusted with the masonry, and Messrs. J. & H. Wheen, of Porter Street, with the joiner's work. The new pews, which are to be of pitch pine, are supplied by Mr. Loxley, of Corporation Street.

**Leighton Buzzard.**—The memorial-stones of the new buildings for Pulford's school have been laid. The buildings will consist of boys' and girls' school, each measuring 50 feet by 24 feet, with a master's residence. The material employed will be for the most part local sandstone, with white brick facings and Bath stone dressings. The total accommodation will be sufficient for 300 children. The rooms will be lofty and well ventilated, conveniently fitted up, and furnished with suitable apparatus for teaching purposes. Mr. Frederick Gotto, of Leighton Buzzard, is the architect, and Messrs. Edwards & Yarrell are the builders. The cost will be upwards of 1,700*l*., exclusive of commission and school fittings.

### NEW BUILDINGS.

**Sheriff Court House, Paisley.**—This building is in course of erection in St. James's Street. The front elevation, which is nearly 100 feet long, shows two wings, with a recess in the centre, having on the ground-floor a colonnade of Doric columns, resting on a low stylobate, enriched above with an elaborate entablature and balcony, while on the upper storey is a range of boldly-moulded windows. The main cornice of this elevation rests on carved double trusses, with panelled work between and surmounted by vases. The projecting wings of the building have rustic work at each end, enriched at the angles by four sets of coupled Ionic pilasters, the whole crowned by an entablature and dented cornice with a parapet. The principal entrance pierces the recess of the front elevation, and passes through a central vestibule and large hall, giving access to all parts of the buildings. In rear of the building is placed the court, 70 feet long, 35 feet wide, and 30 feet high. Retiring rooms are provided for judge, jury, and bar, separate rooms being also supplied for male and female witnesses. The front of the building on the ground-floor contains sheriff's private room, room for taking proofs, and a room for the sheriff-deputé. The sheriff-clerk's office, also on the ground-floor, is furnished with a public room, private room, and clerk's room, having in connection four fireproof record rooms. On the upper floor are placed the procurator's library and retiring room, procurator-fiscals' office, which includes public, private, productions, and clerks' rooms, the remaining portion of the flat being occupied by a dwelling-house of five apartments for the keeper of the building. The architects of the building are Messrs. Clarke & Bell, of Glasgow.

### SANITARY WORKS.

**Carlisle Public Baths.**—The foundation-stone of the Carlisle public baths was laid on September 4, by Mr. R. S. Ferguson, M.A., F.S.A., mayor of Carlisle. The cost of these baths is being defrayed out of the profits derived from the gas works, and the plans have been prepared by Mr. J. Hepworth, A.M.I.C.E., engineer and manager to the gas and water committee of the city of Carlisle. The entire area to be occupied by the baths is 1,378 square yards. The outer dimensions of the building are 126 feet by 100 feet, the latter measurement being the frontage to James Street, and the former the frontage to Wood Street. The walls are of red brick, relieved with red stone dressings and terra-cotta panels. The principal entrance to the building is from James Street. An ascent of a few steps brings the visitor to the entrance hall, which is 20 feet by 11½ feet, and 16 feet high. Round the walls of this hall is fixed a panelled and moulded dado 4 feet high. The ceiling is boarded and moulded, and the floor laid with tiles. Into this hall opens the ticket-office window. From the entrance hall the several groups of baths are approached. In the first group is a first-class swimming bath, 60 feet long, 30 feet wide, 3 feet 6 inches deep at one end, and falling to 7 feet at the other; there are seventeen dressing boxes, foot and shower baths, four first-class private or slipper baths, and a Roman bath, with shower, spray, and vapour baths. The second group includes six second-class private or slipper baths, shower and vapour baths, swimming bath, 65 feet by 30 feet, 3 feet 6 inches

deep at shallow end, and falling to 7 feet at the other with twenty nine dressing boxes, above which is a balcony with balustrade (approached by stairs) for use when swimming competitions are being held. In the third group accommodation is provided for ladies. This includes a swimming bath, 29 feet by 16 feet, 3 feet deep at the shallow end, falling to 5 feet at the other, with six dressing boxes and a waiting-room. There are also four private baths and a Roman bath, fitted with shower and spray baths. The swimming baths are to be lined with white glazed tiles, and the private baths are to be of porcelain. All the swimming baths are to be lighted from the roofs, which are of iron of a light design and ornamental character. The heating and ventilation of the building have been carefully attended to. At the rear of the building is a boiler-house, fitted with two Cornish boilers, each 16 feet by 5 feet; also a laundry and store-room. There is also room reserved for a Turkish bath, should one be required. The whole building is fitted up on the most approved system. The following are the several contractors for the work, together with the amounts of their respective contracts: Messrs. Beatty Bros., masons and bricklayers, 1,580*l*.; Messrs. Batey & Forster, carpenters, 1,070*l*.; Mr. R. M. Ormerod, plasterer, 59*l*.; Mr. R. L. Lowe, concrete work, 749*l*.; Mr. C. J. Nanson, slater, 209*l*.; Messrs. Kirk & Robley, painters, 192*l*.; Messrs. D. W. Stanfield & Son, ironwork, 207*l*. The total amount of all the contracts is 4,066*l*., but in addition there will be an expenditure of about 2,000*l*. for plumbing, engineering, and tiling work. The work is now being rapidly proceeded with, under the supervision of Mr. H. Higginson (assistant to Mr. Hepworth), and is expected to be finished in April next.

### GENERAL.

**The Glasgow Institute of Fine Arts** held its twenty-second annual meeting on Tuesday, when Sir P. Coats and the Lord Provost Ure were elected respectively president and vice-president.

**A Director** for the Fitzwilliam Museum, Cambridge, to succeed Professor Sidney Colvin, is to be elected on November 10.

**Mr. William Morris** will deliver a lecture on "Art and Labour" to the members of the Leeds Philosophical and Literary Society.

**A Spire** is to be added to Poynton church in memory of the late Lord Vernon, from designs of Mr. Crowther, architect, of Manchester, at a cost of 1,200*l*.

**A Model** has been completed by Mr. W. G. Brooker for the group which is to be memorial of the disaster at the Victoria Hall, Sunderland, by which 186 children were killed. The model represents a mother with her dead child upon her knee. The cost of the statue, which is to be eight feet high, will be 500 guineas. It will be of white marble upon a Sicilian pedestal, and is to be placed in the hall of the free library and museum.

**The Foundation-stone of the Birkenhead Town Hall**, which is to be erected at a cost of about 70,000*l*., from the designs of Messrs. Ellison & Son, was laid on Wednesday.

**Mr. John Jaffray**, of Birmingham, has offered to erect a hospital for chronic cases in the suburbs of the town.

**Mr. R. Q. Lane**, of the Ann Street Iron Works, Belfast, has been commissioned to design the certificate of merit for the Cork Exhibition, which closes to-day. The certificate will correspond with the prize medal, which has been already designed by Mr. Lane, and the best Celtic examples will be followed for the ornament. It is to measure about 20 inches by 17 inches.

**M. Caspar Fossati**, architect, died lately at Morcote, Ticino, at the age of 74. He studied his profession at Milan, Venice, and Rome, and while yet very young he betook himself to St. Petersburg, where he planned and carried out several important public buildings. In the year 1836 the Russian Government sent him to Constantinople to build the new palace of the Russian Embassy at the Porte. He thus became known to Sultan Mahmoud, who charged him with the restoration of St. Sophia, and he was engaged for several years in the erection of public buildings at Constantinople.

**Calcutta Exhibition.**—The commissioners have commanded that the colours, paints, enamels, &c., used on the exhibition buildings are to be exclusively of Messrs. J. B. Orr's (The Silicate Paint Company) manufacture. Messrs. J. B. Orr & Co. have built on their own premises at Charlton a show-case, some 6 feet square and 15 feet high, for the Calcutta Exhibition. It is prepared from the bare wood, and represents their Charlton White Duresco Enamels, &c.

**The Shoreham Harbour Trustees** at a special meeting on Wednesday decided to promote a Bill in the ensuing session of Parliament, conjointly with the promoters of the Eastbourne line, for power to construct a line of railway to be called the London and Southern Railway. The general course of the line will be from Shoreham Harbour towards Hove, having stations at West Brighton, and thence by way of Lewes to Uckfield, joining the line from Eastbourne, thence to London, and joining the London, Chatham, and Dover Railway at Bickenham.



ENGLISH CHURCH  
TARASP, ENCADIN  
ERNEST GEORGE & PETO, ARCHTS.









# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, OCTOBER 13, 1883.

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### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Pupos. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of

Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

### CONTRACTS OPEN.

**ABERDOVEY.**—Oct. 17.—For Construction of a Piled Embankment at Northern End of Pier. Mr. George Owen, C.E., Oswestry.

**ABERTILLERY.**—Oct. 17.—For Widening Aberbeeg Bridge. Mr. James McBean, Surveyor, 6 High Street, Abertillery.

**ARMLEY.**—Oct. 13.—For Building Eight Houses. Mr. Frederick W. Rhodes, Architect, Upper Wortley.

**BIRMINGHAM.**—Oct. 15.—For Construction of Lavatories, &c., at the new Vegetable Market. Mr. William S. Till, Borough Surveyor, Council House, Birmingham.

**BLACKPOOL.**—Oct. 17.—For Extension of Steamboat Jetty (202 yards) Seaward. Mr. Thomas P. Worthington, Engineer, Blackpool.

**BRADFORD.**—Oct. 13.—For Extension of Boys' and Girls' Departments, Lilycroft School. Mr. T. C. Hope, Architect, 27 Kirkgate, Bradford.

**CARDIFF.**—Oct. 22.—For Construction of Wrought-iron Swing Bridge. The Engineer's Office, 16 Bute Crescent, Bute Docks, Cardiff.

**CROYDON.**—Oct. 16.—For Widening Two Bridges over Railway. The Borough Engineer, 8 Katherine Street, Croydon.

**DARLINGTON.**—Oct. 20.—For Building Wesleyan Sunday Schools, Classrooms, &c. Mr. F. W. Brooks, Architect, 40 High Row, Darlington.

**DONCASTER.**—Oct. 18.—For New Premises in Broxholme Lane. Messrs. Wilson & Masters, Architects, Doncaster.

**EAST TWERTON.**—Oct. 20.—For Building Infant School, and for Alterations to Boys' and Girls' Schools. Messrs. Browne & Gill, Architects, 1 Fountain Buildings, Bath.

**ELLAND.**—Oct. 23.—For Building a Fireproof Mill, South Lane. Messrs. Horsfall & Williams, Architects, Post Office Buildings, Halifax.

**FENTON.**—Oct. 15.—For Works and Apparatus for Gas-works. Messrs. Stevenson & Son, C.E., 38 Parliament Street, Westminster.

**GATESHEAD.**—Oct. 13.—For Schoolroom and Vestry to Chapel, Sheriff Hill. Mr. Thomas Reay, Architect, Union Chambers, 32 Grainger Street West, Newcastle-on-Tyne.

**GUISLEY.**—Oct. 13.—For Building Two Houses. Mr. Harry May, Architect, 1 East Parade, Leeds.

**HAMWORTHY.**—Oct. 18.—For Erection of Works. Mr. F. J. Barnes, Architect, Towngate Street, Poole.

**HOPTON.**—Oct. 16.—For Building Manse, Boundary Walls, &c. Mr. Arthur A. Stott, Architect, Heckmondwike.

**LEKEY.**—Oct. 31.—For Building Hydropathic Establishment. Mr. William Bakewell, Architect, 38 Park Square, Leeds.

**INVERNESS.**—Oct. 22.—For Building Station Offices, &c., at Forgie, Enzie, Ruthven, and Buckie. Mr. Paterson, Engineer, Inverness.

**KENSINGTON.**—Oct. 18.—For Fire Extinction Appliances and Alterations to Gas and Water Services at the Workhouse and Infirmary. Messrs. A. & C. Harston, Architects, 15 Leadenhall Street, E.C.

**KERACHIA, INDIA.**—Oct. 29.—For Cast-iron Pipes, Valves, Hydrants, &c. Messrs. F. P. Baker & Co., 6 Bond Court, Walbrook.

**KINGSBRIDGE.**—Oct. 13.—For Restoration of Dodbrooke Church. Mr. John D. Sedding, Architect, 18 Charlotte Street, Bedford Square, W.C.

**LEEDS.**—Oct. 16.—For Building Mission Room to Seat 3,500 Persons. Mr. John Hall, Architect, 59 Albion Street, Leeds.

**LEEDS.**—Oct. 20.—For Building Boundary Walls and other Works for Cattle Market. The Borough Engineer, Town Hall, Leeds.

**MIDDLESBROUGH.**—Oct. 17.—For Enlargement of Dock, comprising Construction of Quay Walls, Timber Wharf, Entrance Lock, &c. Engineer-in-Chief's Office, North-Eastern Railway, Newcastle-on-Tyne.

**NORTH-EASTERN RAILWAY.**—Nov. 14.—For Construction of the Alnwick and Cornhill Branch Line in Two Contracts. Plans at the Engineer-in-Chief's Office, Central Station, Newcastle-on-Tyne.

**NOTTINGHAM.**—For Additions to Savings Bank. Messrs. S. Dutton, Walker & Howitt, Architects, King John Chambers, Bridlesmith Gate, Nottingham.

**NOTTINGHAM.**—Oct. 22.—For Building Additional Court Room and other Works at the County Court. Drawings, &c., at the County Court, Nottingham.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**PRESTWICK.**—Oct. 29.—For Construction of a Reservoir and Filters, Cutting Tracks, and Laying and Jointing Cast-iron Pipes, and other Works. Messrs. J. & A. Leslie & Reid, C.E., 72A George Street, Edinburgh.

**ROTHERHAM.**—Oct. 13.—For Additions and Alterations to Blenheim House. Mr. H. L. Tacon, Architect, 11 Westgate, Rotherham.

**SILSDEN.**—Oct. 13.—For Building Mechanics' Institute. Mr. J. B. Bailey, Architect, North Street, Keighley.

**SOUTHWICK.**—Oct. 20.—For Building Cemetery Chapel, Lodge, and Entrance Gates. Mr. H. T. Gradon, Architect, Durham.

**STANTON.**—Oct. 13.—For Erection of Farm Buildings. Mr. T. Taylor Scott, Architect, 14 Bank Street, Carlisle.

**STARCROSS.**—Oct. 18.—For Additions to Staplake Mount. Mr. James Jerman, Architect, 33 Paul Street, Exeter.

**STOKE-ON-TRENT.**—Oct. 15.—For Warming Smallwood Church with Hot Air. The Incumbent, Smallwood Church, near Scholar Green, Stoke-on-Trent.

**SYDENHAM, CO. DOWN.**—Oct. 13.—For Building School-house. Mr. W. J. Fennell, Architect, 11 Chichester Street, Belfast.

**THURSO.**—Oct. 16.—For Building Episcopal Church. Mr. A. Ross, Architect, 42 Union Street, Inverness.

**WARKWORTH.**—Oct. 17.—For Building Detached Residence. Mr. Arthur Stockwell, Architect, 151 Barras Bridge, Newcastle-on-Tyne.

**WEST BROMWICH.**—Oct. 22.—For Building an Infectious Diseases Hospital. Mr. Edward Pincher, Architect, 274 High Street, West Bromwich.

**WOMBWELL.**—Oct. 15.—For Building Four Houses. Mr. John Whitaker, Architect, 15 Regent Street, Barnsley.



## TENDERS.

## ABERDEEN.

For Two Houses in Bloombank Terrace, Aberdeen. Messrs. ELLIS & WILSON, Architects. Quantities by the Architects.

Grant, mason.  
Milne, carpenter.  
Pirie, slater.  
Masson & Finlay, plasterer.  
Robertson, plumber and gasfitter.  
J. & B. Fyfe, painter and glazier.

## AMPTHILL.

For Building Wesleyan Chapel, Ampthill.

Orchard, Banbury	£3,975	0	0
Smith & Son, Norwood	3,697	0	0
Twelvevrees, Biggleswade	3,697	0	0
Yarrell, Leighton Buzzard	3,593	12	0
Bunn, Luton	3,495	0	0
Wade & Eddy, St. Neots	3,420	0	0
Foster, Kempston	3,405	0	0
Harrison, Bedford	3,317	0	0
W. & A. Cox, Luton	3,105	5	0

## BASINGSTOKE.

For Completion of the Management House at St. Thomas's Home, Basingstoke. Mr. A. R. BARKER, Architect. Quantities by Messrs. J. S. Lee & Son.

GOODALL (accepted) £808 0 0

## BISHOP'S STORTFORD.

For Alterations and Repairs to Cottages on the Property of Mr. T. J. Mann. Mr. A. R. BARKER, Architect.

Cornwell £437 0 0  
FRANKLIN (accepted) 426 0 0

## BLACKBURN.

For Erection of First Portion of St. Silas's Schools, Blackburn. Mr. J. BINTLEY, Architect, Kendal.

Heep & Son	£2,720	0	0
Marshall & Dent	2,637	0	0
Fawcett	2,565	0	0
Edmundson	2,556	0	0
Higson & Sons	2,528	0	0
KENYON & MOULDING (accepted)	2,364	0	0

All of Blackburn.

## CATERHAM VALLEY.

For the Erection of House and Shop, Godstone Road, for Mr. William Edmunds. Mr. FREDERICK ELLIFF (successor to Mr. Richard Martin), Architect, Caterham.

Lee & Son, Adiscombe	£1,144	0	0
Thompson, Caterham Valley	1,135	0	0
Masters & Sons, Anerley	1,060	0	0
WARD, Warlingham (accepted)	1,050	0	0

## COLCHESTER.

For Extension of the Eastern Counties Asylum for Idiots, Colchester, for the accommodation of 40 inmates. Mr. R. FRANK VALLANCE, Architect, Mansfield and Nottingham. Quantities by the Architect.

Betts, Ross & Co., Clacton-on-Sea	£9,733	0	0
Mason & Son, Haverhill	9,350	0	0
Sindall, Cambridge	9,000	0	0
Diss, West Bugholt	8,290	0	0
Oldridge, Colchester	8,228	0	0
Eade, Lexden	8,200	0	0
Lee, Colchester	8,000	0	0
Greenwood, Mansfield	7,850	0	0
Everett & Son, Colchester	7,816	10	0
Foster & Dicksee, Rugby	7,666	0	0
Dobson, Colchester	7,578	0	0
J. & A. Brown, Braintree	7,525	0	0
Chambers, Colchester	7,500	0	0
Smith, Ipswich	7,494	17	0
Wood, Chelmsford	7,346	0	0
Dupont, Colchester	7,275	0	0
Gibbons, Ipswich	7,250	0	0
GRIMWOOD & SONS, Sudbury (accepted)	6,999	0	0

## CORK.

For Rebuilding Store, Charlotte Quay, Cork. Mr. K. D. ROCHE, Architect, Cork.

Barry, Blackrock	£575	0	0
Keller, Cork	564	0	0
Coffey, Middleton	609	7	0
O'LYNN, Cork (accepted)	500	0	0

## CREWE.

For Erection of Church at Crewe. Messrs. PALEY & AUSTIN, Architects, Lancaster. Quantities by Mr. W. Wright, Lancaster.

Yates, Liverpool	£4,279	0	0
Jones, Gloucester	4,170	0	0
Fairhurst, Higher Whitley	4,060	0	0
Winnard, Wigan	3,632	3	9
Foster & Dicksee, Rugby	3,455	0	0
Leicester, Northwich	3,443	0	0
Parnell & Son, Rugby	3,430	0	0
Bradney & Co., Wolverhampton	3,250	0	0
Hamilton, Altrincham	3,150	0	0
Roberts, Chester	3,090	12	6
Gabbott, Liverpool	3,050	0	0
Stringer, Sandbach	3,043	0	0
Gibson, Tunstall	2,955	0	0
Beckett, Hartford	2,944	0	0
Cotterill, Crewe (accepted)	2,915	0	0

## CRUMPSALL.

For Works in Clarendon Road. Mr. JAMES SMITH, Surveyor.

Naylor	£695	16	0
Hardy	636	0	0
Etheridge	630	0	0
Unsworth	600	0	0
OADEN (accepted)	560	0	0

## GUILDFORD.

For Boundary Walling, Epsom and Sydenham Roads, Guildford. Messrs. PEAK, LUNN & PEAK, Architects.

Pink, Milford	£244	10	0
Smith, Guildford	224	0	0
Martin, Wells & Co., Aldershot	200	0	0
GARNETT & MILLS, Guildford (accepted)	179	0	0
Elliott, Guildford (withdrawn)	126	0	0

For Alterations and Repairs at the Old British School premises, for the Guildford School Board. Messrs. PEAK, LUNN & PEAK, Architects.

Elliott	£283	16	0
Burdett & Son	259	9	9
LUNN (accepted)	205	5	0

For Detached Cottage, Denbigh Road, Guildford. Messrs. PEAK, LUNN & PEAK, Architects.

Downes, Guildford	£370	0	0
Billimore & Smith, Guildford	325	0	0
Harms, Woking	315	0	0
G. & R. Smith, Guildford	301	0	0
Elliott, Guildford	285	0	0
TRIBE & ROBINSON, Guildford (accepted)	283	9	6

## HAMBLEDEN.

For Alterations and Additions to Varnell's Cottage, Hambleden, Henley-on-Thames, for Admiral Ryder. Mr. A. R. BARKER, Architect.

MILLINGTON (accepted) £255 19 4

## HANLEY.

For Additions to Eastwood Sanitary Works, Hanley, for Mr. George Homson. Mr. AMBROSE WOOD, Architect, Regent House, Hanley. Quantities by the Architect.

Ward	£249	0	0
Cornes	220	0	0

## Amended Tenders.

Ward	255	0	0
CORNES (accepted)	224	15	0

## HINCKLEY.

For Building House at Hinckley for Mr. J. Alcock. Mr. JOSIAS WELLS, Architect.

T. & W. Herbert, Leicester	£1,600	0	0
Law & King, Lutterworth	1,550	0	0
Shilton, Stoke Golding	1,525	0	0
T. & G. Harold, Hinckley	1,448	10	0
Norton, Stoney Stanton	1,362	0	0
J. & W. HARROLD, Hinckley (accepted)	1,350	16	6

## IPSWICH.

For the Enlargement of St. Michael's Church, Ipswich. Mr. E. F. BISSHOPP, Architect.

Tooley	£1,830	0	0
Girling	1,798	0	0
SMITH (accepted)	1,748	17	0
Wyatt	1,728	0	0

## KILMARNOCK.

For Construction of an Additional Filter at North Craig, for the Kilmarnock Water Company.

Moffat & Sons, Paisley	£1,446	6	6
Wallace, Kilmarnock	1,391	0	0
Reid, Kilmarnock	1,370	19	10
Calderwood, Kilmarnock	1,332	5	0
Duncan, Glasgow	1,324	17	4
Pearson, Kilmarnock	1,295	17	4
Urquhart, Glasgow	1,285	1	8
Boyd & Forrest, Kilmarnock	1,230	4	9
Bolton, Glasgow	1,195	9	1
J. & W. Osborne, Ayr	1,180	14	6
Muir, Kilmarnock	1,107	14	0
DUNCAN, Glasgow (accepted)	1,107	1	9

## LEYTONSTONE.

For the Erection of Oakum and Wood-chopping Sheds upon Premises in Union Lane, Leytonstone, for the Guardians of West Ham Union. Mr. LEWIS ANGELL, Architect.

Keen, Plaistow	£3,350	0	0
Ayres, Woodford	2,800	0	0
Martin, Upton	2,749	10	0
Nicholson, Forest Gate	2,707	0	0
Smith, Forest Gate	2,700	0	0
Hawkins, Mile End	2,610	0	0
Gregar, Stratford	2,579	0	0
Gentry, Stratford	2,477	0	0
Horlock, Barking Road	2,475	0	0
Webb, Stratford	2,475	0	0
Burling, Ramsgate	2,439	0	0
Cox, Hackney	2,420	0	0
RUSSELL, Forest Gate (accepted)	2,100	0	0

## LLANELLY.

For Drainage Works, Llanelly. Mr. GEORGE WATKAY, Engineer. Quantities by the Engineer.

Lewis, Swansea	£1,931	10	0
Weight, Liverpool	1,698	11	0
Williams, Swansea	1,394	19	1
JONES, Llanelly (accepted)	1,225	8	9

## For Stoneware Pipes.

Woodman Sanitary Pipe and Brick Com-	1,274	14	10
pany, Elland	919	7	8
Brooks & Puckup, Burnley	809	1	9
The Company, Buckley	747	9	2
Doulton & Co., London	745	12	5
Hill, Manchester	684	1	3
C. E. & H. Peel, Swansea	644	9	10
Badham, Holborn	606	10	4
Jenkins, Llanelly	603	14	11
Williams, Llanelly	596	3	8
Lloyd, Llanelly	595	0	0
Palmer, Llanelly	593	5	9
Thomas & Co., Llanelly	587	10	
HARRIES, Llanelly (accepted)			

## ISLE OF WIGHT.

For the Restoration of the Parish Church of All Saints, Newchurch, Isle of Wight. Mr. A. R. BARKER, Architect.

NORTON & MOSES (accepted) £565 0 0

## KING SOMBORNE.

For Alterations and Additions to King Somborne Vicarage, Hants. Mr. A. R. BARKER, Architect.

Wilks, North Waltham £774 14 0  
ANNETT & SON, Andover 746 9 6

## LONDON.

For the Construction of a Footway at Stoke Newington Common for the Incorporated Society of Licensed Victuallers. Mr. H. I. NEWTON, Architect, 27 Great George Street, S.W.

## ROYAL (accepted).

For Alterations at The Five Ails Public-house, Battersea Park Road, for Mr. C. Lacey. Mr. H. I. NEWTON, Architect, 27 Great George Street, S.W.

Cook	£193	10	0
Lamble	183	0	0
Walkley	138	0	0
WATERER & BYFORD (accepted)	113	0	0

For Decorations, &c., to be done at 40 Lowndes Street, Lowndes Square. Messrs. GLASSER & SONS, Surveyors.

Bird	£463	0	0
Hasard Bros.	418	0	0
Kinninmont & Sons	397	0	0
CLARKE & MANNORCH (accepted)	392	0	0

For New Floor, &c., to Tun Room for City of London Brewery Company. Mr. J. JEWTHURST, Architect.

Spencer	£525	0	0
Shurmur	495	0	0
Jackson & Todd	469	10	0
Langmead & Way	398	0	0

For the Erection of New Sunday School at Bowes Park, Wood Green, N. Mr. A. R. BARKER, Architect.

Wheeler, Wynchmore Hill	£1,884	10	0
Gardener, Waltham Abbey	1,280	10	0
Messrs. PATMAN, Enfield (accepted)	1,253	0	0

For Alterations and Additions to Paddock Villas, Edgware Road, Kilburn, for Messrs. Michell & Phillips. Mr. A. R. BARKER, Architect.

Egan & Co.	£2,397	10	0
ROGERS (accepted)	2,348	0	0
Van Camp	2,275	0	0
Handover & Brown	2,243	0	0

For Alterations and Additions at High Street, Kensington, for Messrs. Derry & Jones. Mr. G. G. STANHAM, Architect.

Avis	£995	0	0
Hearle & Son	992	0	0
Shurmur	981	0	0
Adamson & Son	972	0	0
Turtle & Appleton	895	0	0
Cawley	877	0	0

For New Warehouse for Messrs. Clark, Hunt & Co. Mr. W. BRIDSEY, Architect.

Gaisford	£1,602	0	0
Grover	1,568	0	0
Ward	1,563	0	0
Conder	1,477	0	0
Shurmur	1,395	0	0
Marr	1,382	0	0
Boyce	1,373	0	0

For Additions and Alterations to Messrs. Hayward, Bros. & Eckstein's Premises, Union Street, Southwark, S.E. Messrs. HENRY JARVIS & SON, Architects, 29 Trinity Square, Southwark, S.E.

Lawrance	£2,370	0	0
Josolyne	2,370	0	0
Falkner	2,325	0	0
Rider & Son	2,288	0	0
Burman & Sons	2,197	0	0
Canning & Mullins	2,067	0	0
Conder	2,050	0	0

## MACHEN.

For Additions and Alterations to Wain Fawr and Machen Schools, for the Machen School Board, Mon. Mr. E. A. LANSOWNE, Architect.

## Wain Fawr Schools.

Rosser, Risca	£498	0	0
Moore, Newport	465	0	0
JONES, Newport (accepted)	453	0	0

## Machen Schools.

Jones, Newport	578	0	0
Moore, Newport	563	0	0
PHILLIPS, Machen (accepted)	478	0	0

## NORTHAMPTON.

For New Theatre, Northampton, for Mr. J. C. Franklin. Mr. C. J. PHIPPS, F.S.A., Architect, London. Quantities by Mr. C. Dorman, Northampton.

Foster & Dicksee, Rugby	£6,384	0	0
Branson & Son, Northampton	5,825	0	0
Archer & Brown, Northampton	5,700	0	0
Ireson, Northampton	5,655	0	0
Smith Bros., Northampton	5,525	0	0
Reynolds & Son, Northampton	5,475	0	0
Green Bros., Northampton	5,475	0	0
Woodford & Sons, Northampton	5,290	0	0
Wingrove, Northampton	5,260	0	0
MARTIN, Northampton (accepted)	4,970	0	0

## ORMSKIRK.

For Additions and Alterations at the Workhouse, Ormskirk. Mr. THOMAS KISSACK, Architect.

T. Riding, Ormskirk (including concrete)	£1,333	0	0
Toole, Birkdale	1,210	0	0
Hutchinson, Southport	1,176	0	0
Robinson, Ormskirk	1,160	0	0
W. Riding, Ormskirk	1,044	19	0
Brownley, Chorley	1,031	10	0



PORT GORDON.

For Building Dwelling-house, Port Gordon, N.B. Mr. G. A. BRUCE, Architect.		
Stewart,* Keith, mason	£300	0 0
Watt & Clark, Aberdeen, carpenter	286	0 0
Cheyne & Co.,* Buckie, mason	280	0 0
Mitchell,* Banff, carpenter	225	0 0
Inkster & Munro,* Buckie, plasterer	69	5 0
Annand, Keith, plumber	67	0 0
J. Barclay, Buckie, slater	42	0 0
T. Barclay,* Buckie, plumber	41	10 0
McKenzie,* Buckie, painter and glazier	37	0 0
Murray,* Lossiemouth, slater	22	0 0
* Accepted.		

STOUGHTON.

For row of Six Cottages, Cemetery Road, Stoughton. Messrs. PEAK, LUNN & PEAK, Architects. Proprietors finding bricks and tiles.		
G. & R. Smith, Guildford	£835	0 0
Christmas, Ripley	775	0 0
Elliott, Guildford	759	0 0
Frampton, Guildford	689	10 0
Robins & Sons, Farnham	550	0 0

STOKE.

For Repairs to Gower Farm, Stoke, Surrey, for the Rev. F. P. Phillips. Mr. HERBERT D. APPLETON, Architect, 157 Wool Exchange, E.C.		
Leek, jun.	£545	0 0
Wood	435	0 0
J. & S. Garner	451	6 0
Newland	425	0 0

SUNDERLAND.

For Building Cottage and Stables, Castletown Vicarage, Sunderland. Messrs. J. & T. TILMAN, R.L.B.A., Architects.		
Scott & Sons	£342	0 0
Douglas	287	0 0
DAVIDSON (accepted)	265	0 0
Broad	263	10 0

TORQUAY.

For Alterations and Additions to Wellswood, Torquay, for Admiral Ryder. Mr. A. R. BAKER, Architect, Goss, Torquay (accepted)		
	£1,969	17 0

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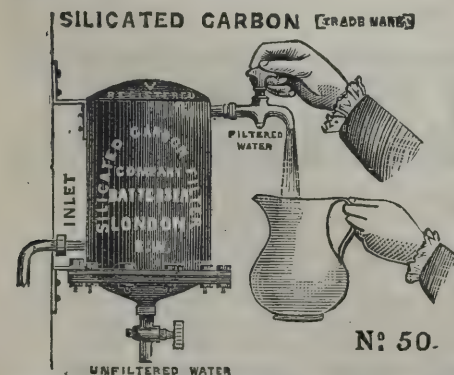
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TOTTENHAM.

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Portland Road.		
Bell	£812	0 0
Jackson & Son	720	0 0
Aspinall & Son	678	0 0
Bradshaw & Co.	668	7 0
BLOOMFIELD (accepted)	607	17 0
Pelham Road.		
Bell	597	0 0
Bradshaw & Co.	560	10 0
Jackson & Son	560	0 0
Aspinall & Son	525	0 0
BLOOMFIELD (accepted)	477	5 0
Houghton Road.		
Bell	385	0 0
Jackson & Son	380	0 0
Aspinall & Son	357	0 0
Bradshaw & Co.	350	5 0
BLOOMFIELD (accepted)	316	13 0
Edith Road.		
Bradshaw & Co.	505	11 0
Bloomfield	482	10 0
Bell	425	0 0
Jackson & Son	420	0 0
ASPINALL & SON (accepted)	400	0 0
Palace Road.		
Bradshaw & Co.	1,220	3 0
Bloomfield	1,173	16 0
Bell	1,128	0 0
Jackson & Son	1,120	0 0
ASPINALL & SON (accepted)	1,100	0 0
Dorset Road.		
Jackson & Son	880	0 0
Bell	879	0 0
Aspinall	850	0 0
Bradshaw & Co.	835	0 0
BLOOMFIELD (accepted)	769	0 0
The Crescent.		
Bell	1,320	0 0
Jackson & Son	1,275	0 0
Bradshaw & Co.	1,250	7 0
Aspinall & Son	1,230	0 0
BLOOMFIELD (accepted)	1,136	19 0
Sherborough Road.		
Bell	376	0 0
Bradshaw & Co.	370	5 0
Aspinall & Son	339	0 0
Jackson	325	0 0
BLOOMFIELD (accepted)	316	10 0

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HENRY KING, (Late GREEN & KING.) House Painter, Upholsterer, and General Contractor, 4 Lower Seymour St., Portman Sq., W. (Late of 100 NEW BOND STREET.) DESIGNS PREPARED AND ESTIMATES GIVEN.

FREEHOLD BUILDING LAND.—To be Sold by Tender, a desirable Plot, having fifty-four feet frontage to Chapel Road, Cornwall Road, Notting Hill. For forms of Tender, apply to Mr. REDDAN, 38 Oxford Gardens, Ladbrooke Grove Road, Notting Hill.

TOTTENHAM—continued.

Hornsey Park Road.		
Pizzev	1,200	0 0
Jackson & Son	1,080	0 0
Bell	1,059	0 0
Bradshaw & Co.	1,027	0 0
Aspinall & Son	1,020	0 0
BLOOMFIELD (accepted)	896	1 0
Alexandra Road.		
Pizzev	822	0 0
Jackson & Son	700	0 0
Bell	677	0 0
Bradshaw & Co.	660	16 0
Aspinall & Son	660	0 0
BLOOMFIELD (accepted)	591	2 0
Park Riding.		
Pizzev	938	0 0
Jackson & Son	800	0 0
Bell	782	0 0
Bradshaw	773	17 0
Aspinall	770	0 0
BLOOMFIELD (accepted)	692	7 0
Concrete Invert Moselle Brook.		
Iles	800	0 0
Bell	792	0 0
Bloomfield	646	0 0
Grise	640	0 0
Mowlem & Co.	595	0 0
Vernon, Ewens, & Co.	572	0 0
Humphreys	560	0 0
FAWKES (accepted)	554	0 0
WIMBLEDON.		
For Alterations and Additions to a House in Parkside, Wimbledon Common. Mr. GODFREY PINKERTON, Architect.		
Ashby Bros.	£4,487	0 0
Corder	4,278	0 0
Adamson & Sons	4,249	0 0
Pain	4,238	0 0
AVISS & CO. (accepted)	4,060	0 0
WOODFORD.		
For Building Villa at Woodford. Mr. R. W. CRAWLEY Architect.		
Eaton (late Reed & Son)	£1,375	0 0
Alexander, Bow	1,374	0 0
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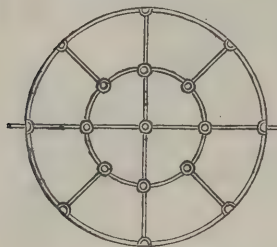
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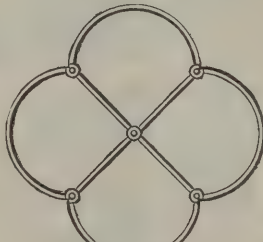
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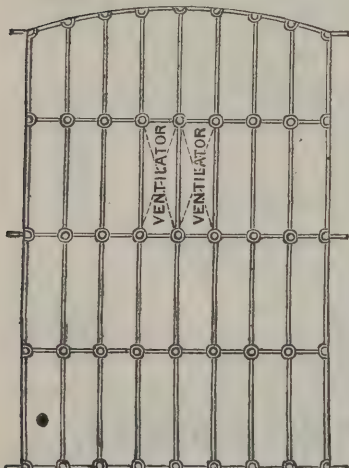
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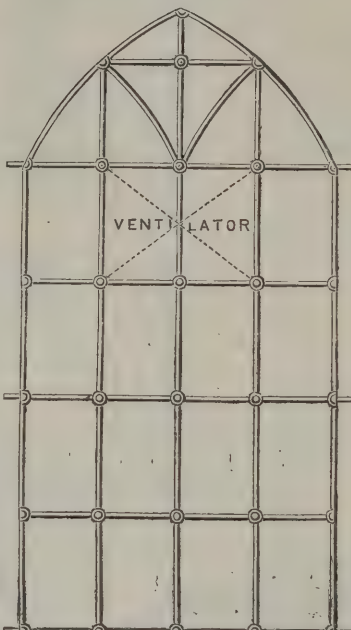
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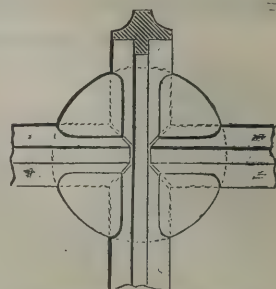
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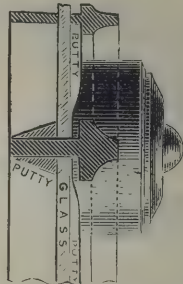
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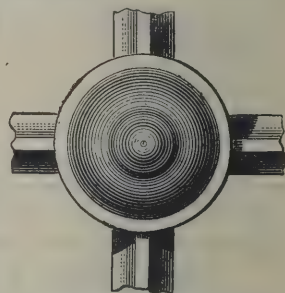
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# The Architect.

## ON COMPREHENSIVE ARTISTIC TRAINING.



THE Ecole des Beaux-Arts, as we informed our readers last week, has declared in favour of the principle of teaching the artist all the arts. In the words of our "Paris Notes," "Henceforward all students, no matter to what particular branch of art their attention is specially directed—whether painting, sculpture, or architecture—will be

obliged to gain a certain amount of knowledge in the other two." In our own Royal Academy the idea underlying this rule has long been recognised. As students of the Academy well know—and some of them, perhaps, a little resentfully—pupils in each division are ordained to attend the professorial lectures in the others. The complete circle of the academical arts in London, we need scarcely add, as in Paris, is composed of the same three constituents, painting, sculpture, and architecture.

Now, in so far as the principle is concerned, if it be a true principle, the question suggests itself whether it ought not to be carried further? That there are other arts besides architecture, sculpture, and painting, everybody has thoroughly understood for any length of time. Poetry and music, for instance, have taken their places for ages in our very school-books in the modern commonwealth of the *Five Fine Arts*. Not only so, but, as the practical influence of the artistic element is extending and expanding in these present days, we perceive more and more plainly that there are any number of other arts *in esse* and *in posse* which may claim the same honourable appreciation. Art is in its way almost infinite, and if Academies fail to recognise the fact, so much the worse for the Academies.

The doctrine that a painter should know, and indeed practice, as much as he is able to learn, not only of sculpture and architecture, but of poetry and music, has been acted upon with excellent effect in many historical instances. The sculptor has no less been expected to prove himself at least a masterly draughtsman, and to profess a little poetry in spirit if no more; to him also, even more than to the painter, a smattering of architecture has always been useful; and music of course will be his delight, if so it can be. The architect, again, when of any academical pretension, has quite as often professed to be acquainted, critically if not otherwise, with a circle of arts of any diameter that might be required; and in our own day there are few artistic architects who fail to manifest a pretty shrewd appreciation of most of the art work that is going. Of the poet and the musician, if we cannot say so much, we may at any rate suggest that, the more accomplished they are as men of artistic sensibilities, the wider will be their acquaintance with everything that is of artistic character. It is only fair, however, to admit that the poet and the musician are somewhat restricted in their practical sympathies; and if this consideration serves to bring into more substantial form the closer relations which no doubt exist between painting, sculpture, and architecture, the conclusion need not be unwelcome. But at the same time the case is thus rendered all the stronger in favour of the proposition that any intercommunion which may be advocated for these three arts ought to embrace in other directions other arts that are kindred to these. Indeed, this is only one of many forms of the general question which is now becoming every day more urgent in a practical nation like ours, that the so-called minor arts, as compared with the academical, have the same essence and the same importance, possibly sometimes even a greater importance, if value is to be reckoned by extent of beneficial influence.

The rule, therefore, which is laid down in our Royal Academy, and now in the French *Ecole*, may be put in this way—that the arts of the pencil are so far mutual aids and accessories to each other, both in principle and in practice, that it is advisable for the specialist student of one branch to acquire to some extent an appreciative knowledge of all other branches. But we must at once repudiate the limitation of this doctrine

to the traditional circle of "the three arts." It cannot be too often repeated that this restricted scheme of art is merely a dogma of the Renaissance, now superseded by a broader and more liberal *régime*. Even at the time of the Renaissance, it must not be forgotten, there were arts quite beside the three, which in the person of such a man as BENVENUTO CELLINI were most notably recognised and abundantly admired. Without going too much into particulars, we may freely admit, nevertheless, that there were points of etiquette then, and that there are the same now, whereby even a BENVENUTO CELLINI must be placed in one category and a MICHAEL ANGELO in another; but it is happily coming to pass that the distinction is disappearing; and when Mr. SEYMOUR HADEN, for example, claims the admission of a new class of artists of his own into the ranks of the Academy, is it not really the case that he is the unconscious representative of a whole outside circle of arts supplementary, all of which are equally entitled to full artistic recognition? How far, then, ought the students of the Academy to be instructed in the entire scheme of art, and how far ought this scheme to be considered for that purpose to extend?

The answer is surely not difficult. Take a typical case. The young painter of what is called the true English school is very often disposed to think—and naturally enough—that to paint a picture of the particular order which he favours is a thing quite by itself; and that the artist, therefore, whose happiness it is to achieve such a task with success, amply fulfils his vocation as regards study when he overtakes all that belongs to the direct production of the kind of work for which nature has adapted him. But this is a narrow view, not only of his personal function, but of his individual genius, and much more of the scope of his obligations to the cause of art. True, by the rule of the division of labour, it is well for every worker to confine himself chiefly to his own specialty. To have too many irons in the fire is proverbially unwise, and to be jack of all trades and master of none is equally well understood to be the upshot of cleverness too extensively applied. But all this is matter of degree, and we have only to allow that every man's capacity must be fully taken into account as the measure of his versatility and we relieve the principle before us from all further doubt. To confine one's attention, for the sake of perfection, to a limited field of exertion and exercise, may still be a rule of expediency; but there is another rule of expediency which is equally sound, namely, to extend one's purview, for the sake of that breadth of comprehension which may be called artistic magnanimity, as widely as shall be reasonably possible and in all directions whatever.

Strange to say, it is the practitioners of the minor arts—the outsiders in the sight of the academical men—who seem to stand foremost just now in the appreciation of this comprehensiveness of artistic study. A designer of glass-painting, for example, a carver, or a decorator—of course of the highest order—may be actually found any day in possession of an amount of knowledge of figure-drawing, landscape, modelling, architecture, colour, costume, furniture, metal work, textile work, fictile work, and indeed all kinds of historical, national, and characteristic ornamentation, which not only is much more than a mere critical acquaintance with the generalia of those subjects, but will certainly extend in some departments as far as manipulative skill, and in all to the full limit of experienced directorship. Perhaps the architects come next in order; but it is only because of their having lately assumed the function of designers in the minor arts. Painters and sculptors will say that they hold themselves aloof; but at any rate there are so few of them who can pretend to go any considerable way beyond the work of their own studios, that, as practical leaders of public opinion in artistic affairs at large, they are undeniably little better than amateurs. The new rule of the Ecole des Beaux-Arts suggests to us the hope that this backwardness in respect of the public usefulness of professed artists of high class may come to be modified, in so far as it is due to personal reserve, by a recognition of broader views of artistic duty, and, in so far as it may be traceable to defective acquaintance with the wider fields of criticism, by a direct application of the principle of comprehensive academical education. May we say without offence that the execution of pictures for sale, even when on the very highest artistic ground, is but the "trade" of an artist, and that it is his earnest study of the underlying principles of art, of all other art as well as his own, and his active exercise of the intellectual qualities of the practical



artistic exemplar and leader, which alone can entitle him to regard himself as one lifted above this level? In another generation, when the Royal Academy of Arts has become developed into a council of all artists, although part of the number may doubtless continue to be the great workmen of the studios, caring for nothing but the work they do of themselves, the majority, it is to be expected, will assume the true character of Masters of the Guild, skilled in all that is beautiful, and authoritative therefore in everything that belongs to the whole science of the arts.

### THE ROMAN EMPERORS IN MARBLE.

IN our last number we noticed some of M. RYDBERG'S articles on Greek sculpture, and we now propose to glance over those which have the statues and busts of a few of the Roman emperors for their subjects. His endeavour has been to discover how far the portraits afford evidence of the characters of the emperors which is given in history. But M. RYDBERG does not write as a physiognomist merely. He is a student of the minds and manners of men, and he evidently believes that the sculptors were like himself, and therefore were able to give revelations of the thoughts which inspired the emperors. His "Roman Emperors in Marble" thus becomes a counterpart to the analyses of the characters of CÆSAR, AUGUSTUS, TIBERIUS, CALIGULA, CLAUDIUS, and NERO which have been attempted by so many ancient and modern writers, and, for all we know, the Swedish journalist may be as near the truth as SÜETONIUS or GIBBON.

When one speaks of Imperial Rome, the thought of the mighty JULIUS naturally first comes to the mind. To him rather than to any of his successors the maxim of the old lawyers is applicable, *Ubi Cæsar, ibi Roma*. His history fills the world, and so much has been written about him we seem to know something of the man himself. But it is remarkable that the sculptor's art has preserved nothing for us of CÆSAR, as he appeared in the days when he was best known in Rome. There are busts and statues like that in the British Museum (and which probably are not all imaginative portraits), which suggest the dictator, who knew too well that he was surrounded by mortal enemies; but the young CAIUS CÆSAR, that was supposed to contain within him many a MARIUS; the dare-devil that, when a prisoner among pirates, told his captors he would one day hang them all; the sceptic that was Pontifex Maximus; the dandy, whose thoughts appeared to be absorbed by his ambrosial locks—all these phases of character are not represented in art. The statue of CÆSAR which is in the Capitol does not suggest the genius who conquered continents, but was afraid of his creditors, the orator who excelled CICERO in style, the idol of the golden youth of Rome. What we have, says M. RYDBERG, is the shrewd calculator who was able to turn the vices as well as the virtues of his countrymen into an advantage for himself. The arrangement of certain other works near that statue in the Conservator's palace forms a commentary on his career. It is flanked by colossal heads of OTHO and DOMITIAN; opposite is a lion bearing a horse, which might symbolise the destruction of the Republic; and at the side is a relief in which are represented barbarian prisoners, with hands hewn off, and who are a consequence of the imperial system.

Very different in character is the bust of the young AUGUSTUS which was found by Consul FAGAN at Ostia, and is now in the Chiaramonte Gallery. There is something Hellenic in the contour, as there well might be, for his family were supposed to have been derived from Greece. But the questioning look of the eyes, and the expression of power which is given to the face, would not be found in the representation of a Greek god, much less in one of a mortal. The sculptor of the Chiaramonte bust must have guessed that the day was not far distant when the handsome fellow who sat to him would become the ruler of the world. Accordingly he made it clear to the Romans that the gods had set their seal upon the youth to give assurance of a king. Many an artist since those days has acted on the same principle. There is a portrait of AUGUSTUS at a later period in the Braccio Nuovo of the Vatican. This is a noble figure, with one arm outstretched, as if calming tumults, while the other holds the sceptre. In a bust in the Capitoline Gallery we see him in his latter days.

What do we learn about AUGUSTUS from the various por-

traits which are seen in Rome? It may be said that they do not uphold the opinion concerning his career which has been generally held by scholars. Sir WILLIAM JONES (and as he lived in the eighteenth century he could not have suffered from the emperor's misdeeds) surprised people by the antipathy which he expressed for OCTAVIUS, for he declined to recognise his title of AUGUSTUS. GIBBON goes so far as to say that even in his vices AUGUSTUS was artificial—that he had a cowardly disposition, an unfeeling heart, wore the mask of hypocrisy, and was at first the enemy of the Roman world. Both those characters are derived from the study of books. But M. AMPÈRE, who looks to sculpture for evidence of Roman history, follows GIBBON, for he says that it is plain from the portraits that AUGUSTUS was a hypocrite, and that intrigues and lies, with the fear that comes from guilt, are stamped upon his face. M. RYDBERG derives another conclusion from the portrait busts. AUGUSTUS was, he says, an admirer of the old Roman ways, but he was shrewd enough to see that the people who were around him were unlike their ancestors. His own life had a good deal of republican simplicity. It was his boast that he found a Rome of brick, and left one of marble. But he built no palace for himself. The little house on the Palatine Hill, in which he lived for forty years, belonged to HORTENSIVS, the orator. The colonnade in front was of common tufa, the least esteemed of materials; the interior was devoid of statues, mosaics, or costly furniture. In such a house AUGUSTUS ruled the empire, and taught his children; there his wife and sister spun and wove the stuff he wore in his garments. But this simplicity is considered by M. AMPÈRE to have been one of the political ruses which were easy to AUGUSTUS. It was craft, we are told, which inspired the building of the new Forum and the Temple of Apollo; and when he bought off the opposition of property owners to his new market he was acting as the enemy of the people. If AUGUSTUS were a schemer of this kind, some suggestion of his defects must have appeared in one or other of his numerous portraits. All the sculptors could hardly have been united in a conspiracy to represent him as better than nature and his own actions had made him. In his last hours AUGUSTUS is said to have asked for the approval of the bystanders (*vos plaudite!*); some say that in death as in life he was acting; but on the other hand it may also be assumed that he sought for that recognition of success which a man who had fulfilled most difficult duties was entitled to expect.

M. RYDBERG fancies he sees some resemblance to AUGUSTUS in the busts of his successor and stepson TIBERIUS. But he says it would be necessary to have a series of busts placed side by side in order to understand the retrogression of TIBERIUS. The smile which is stereotyped on his statues does not appear to be sincere and is at variance with the coldness of the eyes, and the profligacy of his old age in the Campania is foreshadowed in one of the Capitoline busts. But as they omitted the boils which disfigured his countenance, the artists may have also ignored traits of character which were patent to their eyes. When TIBERIUS was most tyrannical a statue of him was carved, and an ear was placed at the foot in order to suggest that there was a god in Rome by whom all things were heard. M. RYDBERG cannot, however, believe that even TIBERIUS was without some goodness. If he did evil deeds, he may have suffered terribly in expiation. In his old age the gods had, he said, consumed him with tortures, and in his punishment, as in his life, there is much that is Titanic.

CALIGULA, who was the third emperor, during the four years of his reign acted like a very wicked boy. One of his "fads" was gigantic buildings and structures, and many an unfortunate architect may have suffered for failing to do impossibilities. He ordered a bridge to be constructed across the Bay of Puteoli, a distance of about three miles. After he passed over a couple of times, the people were permitted to walk upon the bridge, and then, it is said, they were thrown into the sea. This was a specimen of his practical jokes. He built houses for himself in absurd fashions. His palace was on the Palatine, and he ordered a bridge to be constructed which should connect it with the Capitoline, where JUPITER had a temple, in order that he might commune with his fellow divinity. He removed the heads of many statues of the gods and substituted for them likenesses of himself; and he destroyed the statues of the Romans which had been preserved by AUGUSTUS. After his death the statues of CALIGULA were ordered to be destroyed in a night, and looking at the



few examples which have survived, the loss need not be deplored.

A statue of TIBERIUS CLAUDIUS, who reigned between 41 and 54 A.D., is to M. RYDBERG suggestive of HAMLET, and he believes that SHAKESPEARE must have been reading about the emperor before he wrote the tragedy. If anything British could have a resemblance to CLAUDIUS it would be JAMES I. They were both students, one taking up theology and the other Etrurian and Carthaginian chronology; both, in spite of their learning, were considered blockheads; both were gluttonous, nervous, and ungainly. A statue of CLAUDIUS was dug out at Civita Lavigna in 1865, which corresponds with what is recorded of the emperor. He does not seem to threaten and command but rather to explain and excuse. CLAUDIUS looks as if it needed some strain to make him assume an heroic pose. In one respect he was, however, like HAMLET, for he was not equal to the position which was thrust upon him.

Of late days attempts have been made to whitewash some of those persons who for generations were supposed to be infamous. JUDAS, CATILINE, LUCREZIA BORGIA, HENRY VIII., have had their apologists. It is now the turn for NERO, who finds a defender in M. RYDBERG. NERO is described as being an artist in soul, and the deeds which have made many generations stand aghast are all said to have had their origin in a desire for the promotion of art. NERO's tutor, SENECA, like many Romans, believed that painting and sculpture were hardly worthy of hands which could grasp the sword and rule a world. This talk, says M. RYDBERG, irritated NERO, because it revealed the existence of the barbarian within the Roman, and the young NERO was convinced that his mission was to drive out the barbarian. His ambition was to Hellenise Rome, and make it a second Athens. The Roman plays and dances which were coarse in character were supplanted by Greek tragedies, and Pyrrhic and other dances by Grecian youths. The gladiatorial combats were transformed into sportive contests, in which senators and knights took part. NERO was an amateur who could paint and carve, the historian says, with no small success. His skill in music will never be forgotten, for it is related that he fiddled while Rome was burning; he was a poet and an actor. As regards the allegation of NERO being an incendiary, M. RYDBERG is incredulous. Rome was at that time full of priceless statues and paintings, and their destruction would be a disaster to a man of NERO's mind. For the cruelties which were afterwards inflicted on the Christians, the blame is ascribed to TIGELLINUS, who was the master of the revels. DE QUINCEY says that in the fire historic Rome, with its ancestral and heraldic honours, went to wreck for ever. But an opportunity was then given to NERO to carry out his plans for a new and more magnificent Rome. He set an example to the nobles in his own golden house, with its fields, lakes, and woods. The descriptions are almost incredible. The walls are said to have been inlaid with gold, precious stones, and ivory, the floors were of mosaic, and the ceilings were covered with plates of ivory. The colonnade measured a thousand feet, and was adorned with a statue of *Nero Apollo* 120 feet high.

NERO believed that in such a palace he would be able to live. But it was found to be impossible to keep out NEMESIS and the Furies with the costliest walls and doors. NERO suffered remorse, and it was then M. RYDBERG believes he directed the statue now known as the *Apollo Belvedere* to be wrought specially or copied from some Delphic model. APOLLO, it was recorded, had descended to the aid of ORESTES: might he not also be disposed to succour another matricide? CARL BOTTICHER maintained that APOLLO held in his right hand the Delphic lustral whip which was the symbol of the atoner of blood-guiltiness, while the left arm was outstretched in protection or in wrath; and this theory is accepted by M. RYDBERG. Whether right or wrong, it gives another opportunity for controversialists to discuss the meaning of the statue.

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## PARIS NOTES.

THE work of unearthing the ruins of the old Arènes de Lutece, the site of which has been acquired by the City of Paris, is being rapidly proceeded with. The main approach, descending to the arena by a pretty stiff incline, 35 mètres long by six in width, has already been cleared, and it is now possible to judge of the view that will be presented by the ruins as a whole when they are completely freed. The chief entrance, above referred to, takes the form of an imposing passage, bordered by walls nearly 13 feet high. To the left on entering the main area will be seen the remains of the rows of seats, rising tier above tier to the level of the Rue Monge; in front is the semicircle formed by the enclosure wall of the arena, and, to the right, in the direction of the Jardin des Plantes, the stage will be clearly outlined by its foundations and substructures; under these pass the pipes used for carrying off the rain-water, which would otherwise have accumulated in the arena. In the public square, which it is purposed to create on this spot, will be erected the columns and other sculptured fragments of the arènes now deposited at the Carnavalet Museum, and it is thus hoped to give a fairly correct idea of this, the most ancient relic of old Paris, dating, as it does, from the reign of Hadrian. Hitherto no antiquarian remains of particular interest apart from those appertaining to the building itself have been discovered.

When the demolition of the Tuileries Palace was undertaken a special committee was appointed to see that the work was duly carried out as specified in the contract, and to select such fragments of architecture as it should judge worthy of preservation. Now that the ruins of the palace have been entirely cleared away, it remains to arrange and classify the various fragments thus laid apart, and distribute them among the various city and state museums. These last relics of the old abode of French royalty—columns, capitals, cornices, bas-reliefs, pedestals, &c., to the amount of at least fifty waggon loads—are now lying in what was formerly the central court of the building. After an inventory has been taken, the committee will proceed to determine what pieces shall be handed over to the City of Paris, and then classify and distribute the remainder, according to epoch, nature, and school of architecture, among the state museums—the Louvre, Cluny, St. Germain, &c.—most fitted for their reception.

A few weeks ago passers-by might have observed the erection of scaffolding in one of the courts of the Grand Opéra, that known as the *Cour du Pavillon des Abonnés*. It was in connection with the decoration of the two extremities of the *Grand Foyer*, which had been suspended owing to the fall of the empire. Everyone acquainted with the promenade-hall known as the *Grand Foyer* will remember the two monumental chimneypieces, one at either end, the caryatides and figures of which are due to the sculptors MM. Carrier-Belleuse and Cordier. Behind these the Foyer extends in both directions—on the left into what is intended for a smoking-gallery, leading to what were to have been the private apartments and box of the emperor; and on the right into a gallery which communicates with the rotunda. This latter gallery, as well as the rotunda itself, have never been decorated, and remain as the masons left them, with bare stone walls and ceilings. The work in progress comprises panelled and vaulted ceilings, wood carvings for the wall-panels destined to receive paintings of allegorical subjects or the mirrors that have been already ordered from the Saint-Gobain manufactory, flooring in Italian mosaics, &c. When completed this part of the building will be devoted, as originally intended, to refreshment-rooms. The central room of the rotunda, which will be known as the ice-room, is to be decorated with landscapes by MM. Harpignies and Thomas. The decoration of the smoking-gallery and other rooms to the left of the *Grand Foyer* will be commenced directly the refreshment-rooms are out of hand, and are expected to surpass all other divans in luxury. The only mementoes of the original design for the decoration of this section of the building are eight superb columns of Tarbes marble intended for the Grand Salon of the rotunda. It is understood at least 7,000,000 frs. (280,000*l.*) will be required for the fitting up and decoration of the two wings alone.

Last week the scaffolding was removed from the lower storeys of the three façades of the new Hôtel des Postes, so that an idea may now be formed of the effect of the building as a whole. Exteriorly it is decidedly severe and even plain, possessing scarcely any decorative work; this severity is, however, somewhat relieved by a row of projecting columns, resembling buttresses, which run all round the immense building and tend to



give it an imposing aspect. Another year or eighteen months will be required to complete the building for public use.

On Monday last the school year commenced at the Ecole des Beaux-Arts, and nearly eight hundred students are found to have entered their names. Almost simultaneously with the reopening, the *Journal Officiel* publishes a decree, embodying the new regulations referred to in last week's *Architect*, which occupy no less than thirty columns of the Government organ, and reorganise the whole system of instruction. The course will in future comprise:

(1) Oral teaching, consisting of classes of general history, anatomy, perspective, mathematics, descriptive geometry, stereotomy, drawing plans, legislation concerning buildings, the history of architecture, decorative drawing and design, the history of the arts, æsthetics, &c.; (2) Practical studies after an examination as to capacity, in the course of which prizes and diplomas will be given; (3) Work in the studios or *ateliers*, of which there are three each for painting, sculpture, and architecture, and one each for the three kinds of engraving, line, medallion, and gem. In future, a pupil who within two years shall not have obtained a prize of some sort in his special branch of art, will be excluded from the *ateliers*, unless he obtain a special permission from the Superior Council of the school. Students must be between fifteen and thirty years of age on their admission, and foreigners will be admitted on presentation of a letter of introduction from their ambassador, minister, or consul-general, and a certificate that they are qualified to pass the preliminary examination required from all pupils.

The Triennial Exhibition of Painting and Sculpture at the Palais de l'Industrie was visited on Sunday last by 19,000 persons, and on the previous Thursday, which was also a free day, by 8,317. Some time ago it was proposed to prolong this exhibition until November 20, and the idea was very favourably received by the press and the public. It was found, however, that the cost of establishing a system of heating for the vast building would have been so costly that the committee have been forced to abandon the idea. The Triennial Salon will, therefore, close as originally proposed, on 31st of this month.

### NEGLECTED PICTURES.

A MEETING of the Manchester Literary Club was held on Monday. Mr. George Milner presided.

Mr. T. C. Horsfall read a short paper, entitled "The Manchester Art Gallery: Neglected Pictures." In this he referred in terms of high commendation to a number of the pictures now in the City Art Gallery, and proceeded: "But though every year has given Manchester people the chance of seeing some good pictures, very few of them have made use of the chance. The attendance at the Royal Institution was always extremely small. This year the transfer of the institution to the town council and the enlargement of the gallery have made more persons think about the place than have thought about it before. This year also the autumn exhibition contains a larger number of good pictures than any previous autumn exhibition, and in it there are some pictures of exceptionally great interest. Mr. Millais's *Grey Lady* proves his possession of other great powers besides those which he has hitherto shown. *Beatrice Cenci* is the only other picture which seems to me to belong to the same class. Is it a ghost we see or a living woman? We feel as little certainty as we should do if we saw that beautiful face and form gliding noiselessly along the corridors of an old crime-stained house at midnight; but we feel at least certain that here is such stuff as ghosts are made of. The sense of hopeless sorrow caused by some terrible wrong or loss could not be felt more keenly in the darkness of a haunted room than before that picture. Then there is Mr. Watts's beautiful *Love and Life*. Was a poet's healthy criticism of life ever more beautifully expressed than in that picture where the tender girl gains from the firm grasp and the smile of love, strength, and courage to pass with defenceless feet over the sharp rocks of life towards the bleak ridge of the future? It seems to me that that picture helps one to feel the high value of kindness; that the old truth which the picture tells gains power to influence life from the beauty in which Mr. Watts has clothed it. A third picture that I should like to mention is Mr. Burne Jones's *Cupid's Hunting Ground*, which also contains a poet's beautiful and thoughtful criticism of life. Any one of these three pictures, or the other pictures without any one of these three, ought to fill the galleries. But though the attendance is this year larger than it has ever been before, it is still very much smaller than one would wish it to be. The general neglect of our picture gallery seems to me to be regretted for many reasons. No class among us, as a class, can be supposed to be fully provided with wholesome occupation for its leisure hours, and looking at pictures is at lowest a

perfectly innocent way of passing time." Mr. Horsfall proceeded to make some suggestions which he thought would increase the usefulness and popularity of the gallery. One was that frequent social meetings should be held in the gallery, and that those who had the leisure should make a point of visiting it upon some particular day. Music would also be an excellent adjunct, and attract many who at present are not seen at the exhibition. What is wanted is a system of training people to look carefully at pictures with the settled purpose of getting enjoyment from them. We need every year a series of lectures dealing in the simplest way with the elements of the subject and delivered in front of the pictures referred to. A handbook containing notices of a few of the best pictures in each of the autumn exhibitions, and sold at a small price, would be most useful. Could not the Literary Club undertake both these kinds of work?

The Rev. W. A. O'Connor said that there was an especial need of explanations being given of pictures of an allegorical character. Critics sometimes found wonderful things in them, but the artist's own meaning was sometimes forgotten. The late Bishop Lee once observed to him in reference to a difference of opinion as to the meaning of a certain passage, "You are thinking so much of what he meant that you forget what he said." That was true also of painters and the critics.

Mr. H. H. Hadfield, referring to the many conjectures as to the meaning of the *Grey Lady* of Millais, said that in reality it was merely a study of a staircase in the Tower, made when the artist was getting material for his picture of the *Princes in the Tower*, and the figure was entirely an afterthought.

Mr. Howorth thought that some of Mr. Horsfall's suggestions were very practical, but he did not think that the mere assembling of a large number of people in a large room containing many pictures would lead to an increase in the love of art. He was strongly of opinion that copious explanations should be given, and he would apply to pictures the remark of Dr. Birch as to antiquities under his charge in the British Museum—"We cannot label too much."

Mr. Mortimer thought that the increased price charged for season tickets was a mistake, and had deterred a large number of those who had been habitual visitors in previous years.

Mr. Bennett endorsed this view, and further thought that the diversity of opinion shown in the criticisms that did appear was a sufficient indication of the difficulty of the task suggested by Mr. Horsfall.

Mr. Axon said that any one who visited the Liverpool Art Gallery must be struck by the crowds that thronged it. So far as the working classes were concerned, the present arrangements practically debared them from seeing the pictures which Mr. Horsfall had so warmly and deservedly praised.

Mr. Milner cordially joined in the suggestion that the gallery ought to be open in the evening, and at a price within the reach of all.

### THE VATICAN LIBRARY.

THE letter recently addressed by Pope Leo XIII. to three cardinals, in which appeal is made to the full study of historical knowledge, has, says a correspondent of the *Glasgow Herald*, been the subject of much comment. The determination of the Pope, expressed in that letter, to open to the perusal of students the documents contained in the jealously guarded Vatican Library and Archives, has naturally drawn public attention to these storehouses of select and valuable materials of history. The Vatican is generally known as a museum. There the masterpieces of Græco-Roman and Roman art are gathered together and arranged in magnificent halls. There the traveller beholds "Laocoon's torture dignifying pain;" or delightedly views the beauties of the world-renowned Apollo, "the lord of the unerring bow, the god of life, and poesy, and light;" or Raphael's last work and masterpiece—*The Transfiguration*—with "those forms divine that lived and breathed, and would live on for ages;" or perhaps, grandest of all, the ceiling of the Sistine, on which Michael Angelo depicted in majestic manner the various phases of the world's history previous to the coming of the Redeemer.

To scholars more than to the general public the library of the Vatican is as a paradise from which, to a great extent, they are excluded; but to which, if there be virtue in the Pope's letter, they may hope to be admitted in the near future. Visitors to the Vatican Library are more likely to carry away a memory of splendid halls adorned with bright frescoes, and rich marbles, and columns, and vases, than a recollection of many books. In fact, there is at first view no book visible. It is only when the elegant wooden cases in these magnificent halls are opened by the keeper that the literary treasures of the place are displayed. Then books are shown which are not readily forgotten, either through the merits recognised in them by the visitor, or because of the enthusiasm they have inspired in the greatest scholars. The famous Vatican Codex is a document of the very highest interest, which you look upon with a special awe and veneration. It is in Greek, and, in the opinion of scholars, surpasses in value and antiquity all other copies of the Scriptures. It is known as the



Alexandrine Codex, from the name of the city in which it was written. It dates from the fourth century according to the general opinion, and it is believed that it is one of the copies which Constantine caused to be made upon superior parchment, by the best copyists, for the use of the chief churches in the east. The script, in which all the letters are capitals, resembles that of the *papyri* found at Herculaneum, and now in the National Museum at Naples. Very few words are abbreviated and the work is remarkable for the purity and simplicity of the characters used in it. The material of which the leaves are composed is said to be the dressed skin of the Egyptian antelope. The whole manuscript has been published. Its completion as a publication dates a few years back.

An interest of another kind is awakened by the "Virgil of the Vatican," dating from the fifth century, illustrated by miniatures which were engraved by Pietro San Bartolo, in forty-nine plates, in 1677. This also has a portrait of Virgil, which, in all probability, has furnished the model to most of the likenesses and busts which we now see. Another Virgil, or rather the fragments of a Virgil, as the former is, is also found here. In one of these copies the four verses at the beginning of the *Æneid*, "Ille ego, qui quondam gracili modulatus avena," &c., are to be found.

In the great hall, where these works are preserved, there are also the Acts of the Apostles, written in letters of gold; a Codex, given by the Queen of Cyprus to Pope Innocent VIII. (1484-1492); some Greek fragments on purple-tinted parchment in silver lettering; "The Chase with Falcons," by the Emperor Frederick II.; "The Life of the Countess Matilda," written by Donizzone, and adorned with miniatures; the New Testament, adorned in like manner; and the "Gesta" of Guidobaldo II., Duke of Urbino, with miniatures by Giulio Clovio. In another case are "The Divine Comedy" of Dante, with miniatures by Clovio, who has drawn those in "The History of the Dukes of Urbino" (two volumes), as also those which illustrate the "Cortigiano" (Courtier) of Castiglione. Amongst other curiosities are two signatures of St. Thomas Aquinas—one in shorthand, and the other in a mixture of long and shorthand; a "Martyrology of a Monastery at Benevento," written in the Longobard character; "The Chronicle of Santa Sofia," near Benevento; "The Lives of the Fathers," by St. Jerome; the "Liber Pontificalis" of Boniface IX.; the "Menologion," or Greek Calendar, of the Emperor Basil; the Breviary of Matthias Corvinus, last King of Hungary; "The Natural History of Decembrio Candido," with drawings on the margins, of which some, it is thought, are by Raphael; "Dante," copied and commented on by Boccaccio; and some chants in the Japanese language and character. Here, also, are the autograph manuscripts of Petrarch and Torquato Tasso; a "Pontifical," illuminated by Pietro Perugino, the master of Raphael; many letters written by Anne Boleyn to Henry VIII.; the work of the same Henry against Luther, for which the title of "Defender of the Faith" was given him by Pope Leo X., with his manuscript inscription to this Pope at the end of the book; the famous *palimpsest* (or parchment twice written upon) discovered by Cardinal Angelo Mai, containing the "Republic" of Cicero and the sermons of St. Augustine on the Psalms, fragments of Dion Cassius in uncial characters, fragments of the plays of Terence of the fourth century (believed to be the most ancient manuscript in existence), and the plays of the same author, with figures, of the eighth century. These are some of the choice works contained in the great hall.

However interesting these may be as manuscripts and rare curiosities, and they are chiefly celebrated as such, their value to history is but slight in comparison with that of other documents collected here. All the collections united together contain, according to Signor Angelo Mazzoni, one of the most recent writers on the subject, the respectable number of nearly 220,000 printed volumes and 25,600 manuscripts, of which 19,641 are in Latin, 3,613 in Greek, 609 in Hebrew, 900 in Arabic, 461 in Syriac, 79 in Coptic, 1 in Samaritan, 71 in Ethiopian, 65 in Persian, 13 in Armenian, 64 in Turkish, 24 in Indian, 20 in Slav, 2 in Iberian, 10 in Chinese, and some in Sanscrit.

The general contents and arrangements of the archives, known but to few, are correctly described in a recent number of the *Paris Figaro*. Formerly this rich collection of documents was housed in the upper part of the papal palace—"La Specola," as it was called—to which a gently-sloping staircase of 333 steps led up. It was the late pope who had the documents removed to their present rooms, where they occupy three floors. The first floor, containing eight rooms adorned with excellent paintings by Brilli, is called "the department of Avignon," because here are collected all that is left of the archives of the papacy during the residence in Avignon—the rescripts, bulls, briefs, apostolic letters, &c. The rescripts, which date in almost continuous succession from Innocent III. (1198-1216), come down to the present day. A few rescripts of popes anterior to Innocent are to be found here. One of the most curious is that of Boniface VIII., some parts of the document having been effaced. The second floor, consisting of four large halls, contains the archives "del Castello"—that is to say, all documents relating to the temporal power of the popes, which were formerly deposited in the Castel Sant' Angelo, whence they were ordered to be removed in three days by the French

General Berthier in his invasion of Rome in 1796. Great disorder and considerable loss of documents followed this removal. The Castello archives contain the famous imperial diplomas of donations to the popes, with the ancient golden bull or seals attached. The third floor contains the documents of the nunciatures—the correspondence of the papal representatives or nuncios accredited to the various foreign Governments. Here there is considerable difficulty in finding particular documents; the only classification is by states, and the task of finding a needle in a bundle of hay is akin to that of finding the document you want in such a mass. There is no catalogue or index for this collection. The huge volumes are bound in chamois leather, and placed in hazelwood cases. One hall has been devoted to "miscellanea"—manuscripts not yet classified, the very contents of which are unknown. Some persons hold that in this uncatalogued miscellanea the manuscript of the "Divine Comedy" is to be found. If this be the case, the discovery will be most valuable, for not a scrap of Dante's manuscript is known to exist.

The books and documents of the Vatican are splendidly housed. It would occupy much space to describe, even briefly, the rich specimens of ancient and modern art contained in the Vatican Library, from the great vase of Aberdeen granite in the large hall (the Duke of Northumberland's gift to Cardinal Antonelli) to the surpassingly interesting collection of early Christian glass—cups and chalices of rich hues—found in the catacombs around Rome. The very walls and ceilings are bright with symbolical or historical paintings. It was the late Lord Lytton who said where there is place for a man there is room for a benefit; and it may be said here that the spirit animating the masters of this library was, wherever there is a square foot of wall there is place for a picture in fresco. In the words of De Rossi, writing on this theme, "to this palace Italy owes the most splendid of her glories, and the preservation and recovery of the Classic arts and culture, and frequently her priority in all kinds of literature and science."

#### THE ITALIAN NATIONAL MEMORIAL.

IT is announced in the *Stampa* that Signor Baccelli, Minister of Public Instruction, has commissioned the well-known sculptor, Signor Monteverdi, to prepare, as quickly as possible, a design for the monument to Victor Emmanuel, to be placed in the middle of the Pantheon. This resolution has been taken in consequence of a telegram which King Humbert has sent to the Minister, and which the *Stampa* has published, together with the Minister's reply. The King telegraphs:—

"I receive remonstrances from all sides on account of the protracted delay in constructing the tomb of King Victor Emmanuel. Knowing from experience how you are acquainted with my sentiments, and are desirous of definitely giving a final resting-place to my father, I beg you speedily to solve the difficulties which have delayed the fulfilment of our ardent wish. I shake your hand.—Your very affectionate, HUMBERT."

The Minister's reply is to the effect that, being acquainted with His Majesty's views, he had always firmly held the opinion that King Victor Emmanuel's tomb should be placed in the middle of the Pantheon, and not in one of the chapels of it; and, certain of His Majesty's consent, he would take prompt measures accordingly.

#### THE GLASGOW INSTITUTE OF ARCHITECTS.

THE annual meeting of the Glasgow Institute was held on Tuesday last. The president and vice-president being unavoidably absent, the chair was, on the motion of Mr. Sellars, taken by Mr. Honeyman, past president.

The annual report stated that the number of members on the register was one less than last year. Since the last meeting Mr. William Spence had died. He was one of the original members, and highly esteemed. The report referred to the action of the Institute in connection with the Glasgow Police Bill. When the Bill was withdrawn, on the intimation of the Lord Advocate that his Burgh Police and Health Bill was to be applied to all burghs in Scotland, it was suggested that all clauses relating to building should be eliminated from the Bill, and embodied in a separate measure based upon the Metropolitan Building Act, and applicable to the whole of Scotland. A deputation, consisting of Mr. Thomson, Mr. Honeyman, and Mr. Campbell Douglas, met the Lord Advocate in London, and his lordship expressed a desire to be furnished with the details of the suggested scheme. The preparation of the statement was delayed by the summer vacation. The report next referred to the examination of candidates for the Royal Institute of British Architects, which is to be held in February 1884, and the claims of the Architects' Benevolent Society on the support of the members was also advocated. It was said that the rules and regulations for the measurement of masons' work was again before the Institute, as well as the subject of measurers' fees. The council had been considering the conditions of the competition for the War Office and Admiralty buildings in London, and were



of opinion that it was exceedingly desirable that certain of them should be amended, more especially those relating to the constitution and duties of the tribunal which is to judge the designs. They had been in communication with the council of the Royal Institute of British Architects on this subject, and had laid before that body a statement of the alterations which they thought desirable, knowing that the Institute had already taken the matter up.

The Chairman moved the adoption of the report, which, he said, showed that there had been no diminution of activity or usefulness on the part of the Institute. For the first time for several years there was no reference in the report to the Municipal Buildings competition. He thought, however, that his feeling would be shared by all the members of the Institute that it was a good thing for the city to see this great undertaking inaugurated, and they especially felt disposed to congratulate the Lord Provost on his having had to do with the commencement of it. With the Police Bill, as a mere local measure, they were done. They had taken an important step in addressing the Lord Advocate on the subject of the general Bill, and if they had done nothing else they had at least got from his lordship a recognition of their *locus standi* in the matter. His own impression was that they ought to make good use of the step they had taken, and that they should not hesitate to go into this matter very cordially, and do their best to secure for the country a really good General Building Act. The Government Offices competition was certainly a very important event, and he trusted that many members of the Institute would think it worth while to go heartily into the competition. They would all remember that on the occasion of the last competition of this kind a Glasgow architect, the late Mr. Rothead, was neck-and-neck with Sir Gilbert Scott, who ultimately carried out the work. There were many reasons for dissatisfaction with the action of the Government in the conduct of that competition, but he believed there was a fair prospect that such muddling would not be repeated on this occasion. He trusted that the Glasgow architects would not only put in a good appearance, but carry off the palm on this occasion. There was nothing whatever on earth to prevent them from doing it. After advocating the claims of the Benevolent Society on members of the Institute, Mr. Honeyman alluded to the proposal to inaugurate an examination in architecture in the city. They were bound to recognise the fact that at present their profession was a sort of disorganised rabble of all sorts and conditions of men. In all parts of the country men took upon themselves to call themselves architects who had no claim whatever to the distinction, and who, unconnected with any association, were perfectly unscrupulous in their conduct. The result of that was that the character of the whole profession was blackened in public estimation. A remarkable instance of this was afforded in a leading article in a London paper. Commenting on professional peculations, the writer went on to say that whereas there were among lawyers and accountants certain black sheep—some men who did dishonourable deeds—among architects the practice to act dishonourably was invariable—there were no exceptions whatever. This was repeated two or three times in the most offensive as well as falsest possible manner. What he would like to say to the writer of that article was this, that if he would name a single member of the Glasgow Institute of Architects, or bring forward such evidence as would lead to the conviction of a single member of the Institute of such conduct as he said was practised by all architects in the country, he should undertake that that man would be expelled from their ranks. It was quite possible that the ignorant cockney who wrote these words didn't know that there were any architects in Scotland; he had no doubt he never heard of the Glasgow Institute of Architects. He would be very willing to speak for his brethren in England—he was proud to say that he could speak for them—but he would content himself with saying that in Scotland, at all events, such conduct as this man attributed to all architects was almost unknown in the profession. He said so without fear of contradiction. One object of such associations as theirs was simply to prevent anything of that kind, as everyone who was admitted into their ranks had to give certain guarantees for his conduct in this respect. He thought also that this was an argument why many in Glasgow who had not yet joined their association should do so. They should identify themselves with some recognised body. It was also a strong reason why they and everyone interested in the profession should encourage every step that was taken in the direction of making admission to their ranks a matter of examination. There must be some test applied to everyone who was to be recognised by the public as an architect, and in that way men who were utterly unworthy to adopt the title would ultimately be excluded from practice.

Mr. Campbell Douglas seconded, and the motion was agreed to unanimously.

Mr. John James Burnet moved that the following gentlemen be elected the council of the Institute, namely: Messrs. James Sellars, jun.; William Landless, Hugh Barclay, John Gordon, John Murdoch, Robert Turnbull, T. L. Watson, David Thomson, James Thomson, Wm. Leiper, and Alex. Skirving.

The motion was adopted.

The council afterwards met in private, when the following gentlemen were elected office-bearers, namely: Mr. James Thomson, president; Mr. David Thomson, vice-president; Mr. William

Landless, hon. treasurer; Mr. John Burnet, auditor; and Mr. William McLean, secretary.

This was all the business.

## ARCHITECTURAL COMPETITIONS.\*

ALTHOUGH once deemed a professional necessity, the practice of "architectural competition" is destined eventually to become the refuge of the incompetent, the inexperienced, the indolent, and the unscrupulous. Like the weeds that are shipped with good seed from abroad, the bad custom came over so mixed with the good that during our more dependent and colonial years it was supposed to be a necessary element of ordinary practice. Although boldly denounced in the home of its origin by some of the foremost architects of the day, including two presidents of the British Architectural Association, and although the great majority everywhere look upon it as more or less injurious to the best interests of all concerned, it is still justified and supported by many as a venerable public and professional necessity; an equally venerable method for the discovery and development of youthful genius; and also on the ground that its acknowledged defects can be remedied in due time by the united efforts of the people and the profession.

Mere antiquity claims little consideration unless coupled with real merit. Although the remote past furnishes the richest materials for the study of art, it is no guide for the architectural practice of the present. The ancient foreign aspect of art competition has as little to say to the modern practitioner as the Greek games or the brutal sports of the Roman amphitheatre. Just as good work was done in the elder days without the stimulus of strife and speculation. The recluse in his cloister, the household servant of pope or cardinal, worked with more than the skill of the public competitor.

In much the greater part of his relations to the world, the architect of to-day is as free from limiting antecedents as the promoter of railroads and telegraphs. The half-equipped and one-sided men are the most nearly allied to the past. The dreamer of wild and impracticable fancies traces his origin to his mythical monkish brother of mediæval days, while the builder architect travels back to the same source to find inspiration for his latter-day enormities in his descent from the brotherhood of "free masons." The well-balanced man, on the contrary, leaves the dead past to bury its dead architects, and studies not their methods of practice, but their monuments.

Modern competitions abroad, especially in England, have little of good to teach us. A volume might be filled with their absurd and often disgraceful record. Our brethren of the "old home" must be a very testy body of men to judge by the criminations and recriminations of the correspondents of their professional journals. The *melée* which follows the announcement of the award of the "assessor" in a "competition" reminds one more of the prize-ring than of any more dignified calling. To a non-believer in such contests some of the late ones seem absurdly funny. Passing by the extended and bitter controversies of the larger tournaments, which would have afforded admirable occasion for the work of "congressional investigating committees," we find a late instance in which some church building promoters were eagerly offered designs by eighty-five architects, represented by more than five hundred drawings prepared at an estimated cost of 8,000 dols. Before the award was made it was ascertained that the projectors of this religious undertaking, in which it was intended to invest only about 30,000 dols., were not in possession of funds sufficient to commence the work of building, so that the remote chance of a beggarly premium was the high goal for which all this loss was suffered. This was a competition with all modern improvements, including a professional "assessor." Whether the "assessor" knowingly lent his name to the sharp game of the promoters does not appear. In another instance, in order to obtain the commission for the restoration of a cathedral, an architect in good standing offered as a bribe a gratuitous design for a reredos. This offer was speedily "seen" by a provincial competitor, but another provincial "went one better" by inducing a friend to undertake to construct the reredos, providing "his man" was employed on the restoration; this offer, of course, carried the day, and the man with the heaviest backer won.

These are not extreme examples, and they abound even after half a century or more of attempted regulation and reform. In England, certainly, the competition system is rotten to the core. Like some other phases of English practice it should teach us what to avoid.

The general history of architectural competitions in America has been to the profession and to the public a record of humiliation, mortification, and pecuniary loss. Little else could be expected of a custom founded on the absurd supposition that a building committee, board of trustees, or an individual client, can secure the best design, construction, and administration of a building

\* A paper read by Mr. John A. Fox at the late Convention of the American Institute of Architects.



by the employment of the architect whose name is appended to certain sketches which are most admired by variously constituted and more or less qualified judges. Practices to which the members of no other profession would stoop come to be encouraged and justified as necessities, and serious work gives way to feverish speculation. All the evils which hamper the efforts of the regular architect cluster about, or originate in, competitions: the want of honourable consideration and respect in some communities, the often futile efforts to obtain fair and equitable compensation for painstaking labour, the low standard of acquirement arising from the prominence given to the chance element in practice, and the growing impression that hard work is not so essential to success as influence combined with tricky design and superficial draughtsmanship. That occasionally a good building is the result of a competition is nothing to the question. It remains none the less true that to the public and the profession at large the practice has proved injurious. It is not a bad saying of the French army that "every private soldier carries a field-marshal's bâton in his knapsack"; but we press the principle too far when we encourage our office boys to think that "capitol" and "state house" commissions are within their early reach, as the awards of happy accidents rather than of patient and self-denying toil. The lack of earnest and faithful workers in the lower ranks may well be traced to this pernicious teaching. The standing of the profession with the public has been seriously lowered by the blunders of incompetent practitioners brought prematurely to the front by the competition system.

Let us not delude ourselves by shifting the responsibility of these and kindred evils on the broad shoulders of the public. The people of America derive much of their information on such matters from their architects, and their representative journals. There is ample evidence that the best of our clientage are willing to pay liberally for what they are led to believe is the best expert service.

If in the train of mismanaged public competitions follow worse managed private ones, and if from the lessons of these follow undignified solicitations of employment; if men not lacking in self-respect under ordinary conditions are constrained to fawn and court indignities; if the feeble and inexperienced resort to competition in rates of compensation as well as in merit of design; and if these irregularities sometimes lead to the scamping of both plan and construction, and finally even to bribery and corruption, let it be remembered that we hold to a great extent the position of teachers, and that a people who take readily to speculation of all kinds are apt pupils in these matters. Already the inventive genius of the West has evolved new phases of competition. Architects have been invited, and some of the so-called have accepted invitations to take part in ventures from which even our hungry foreign brethren would recoil in dismay. There is as yet no case on record where the craft has been induced actually to build state houses "on approval," but the practice is fast tending towards such a consummation.

It has been wrongly claimed that the interests of the junior members of the profession are served by competitions. This, like many other things that hamper us, is an imported mistake. In a community where only the aid of the sign-painter is requisite to constitute an "architect," where every village newspaper gladly chronicles the most crude and imperfect development of local talent, and where technical education is within easy reach of all, there is little danger that future Wrens and Le-Ducs will "be born to blush unseen, and waste their sweetness" at the carpenter's bench. There is room in America to-day for all the skilled architects that our schools and offices can furnish, and the demand is steadily increasing. If we do not occupy the field with trained men the engineers and builders will do so as best they may, and we can have but ourselves to blame for it.

There is too much of the gambling fever in our national air. Its infection to-day threatens legitimate business, and we are not exempt from the losses indirectly entailed by it. Enterprises less reputable than gambling are dignified by the name of speculation, and short roads are eagerly sought which sometimes end in fortune, but often in the felon's dock. The followers of law, of medicine, of religion and art cannot be too careful to keep clear of popular vices of the day, even avoiding the appearance of evil. Temporary success can never justify false methods.

The teachings of public competitions have encouraged the common fallacy, which has even found believers in our courts of justice, that architects are solely draughtsmen, and that drawings are their only products on which a value can be placed. Following this has naturally come the client's claim to the drawings as the only tangible results of service. The charm of design, the cleverness and method of plan, the skill and science of construction, the thousand items of excellence, the result of thought, study, and experience, and, more than all, the slow mastery of the combination of all these, the expensive accumulation of years of arduous toil, become as nothing opposed to the clever picture that has caught the unreasoning popular fancy. If the result is conspicuous failure, the obvious lesson that an architect should be judged by what he builds seems to make but little impression on the sufferers. In the present state of things even the representative picture may have been bought or stolen. It is a notorious fact that some of our

most successful competitors are not even ordinarily competent draughtsmen and designers. It takes but little wisdom to forecast a professional future in which the clever designer and the unscrupulous manipulator shall be encouraged to push themselves to the front.

It is disheartening to reflect on the time and money that have been squandered in these unsuccessful and discreditable ventures, and of the great benefits that might have accrued from the proper use of such an amount of labour.

The profession of the architect, with its heavy responsibilities of life and property, is a wearing one at the best, and it is foolish to add to its embarrassments the anxieties and disappointments of needless strife. We are brethren labouring for common ends, and those worthy ones. The best work is of slow growth. A great project should be wrought out calmly. Bustle, hurry, and rivalry of the meaner sort can only retard its proper development. The intimate and friendly relations of employer and employed, the thorough knowledge of uses, means, and materials—these and many other things essential to real success are daily sacrificed to a professional craze. The fact that such methods have failed conspicuously in the arts of painting and sculpture, where their chances of success should have been tenfold greater, should carry some weight.

In the extreme West it is said that lawyers advertise, compete in rates, and resort to other disreputable devices to obtain employment. In the advance, and on the outskirts of a profession, the guerilla and free lance figure conspicuously, but they have a very demoralising element when mingled with the main body. It is less difficult for an employer to make choice of an architect than of a doctor or lawyer. The acquirements and abilities of the former are more easily gauged and measured than those of the latter, whether it be at the beginning of a career, or in the midst of one. A profession that adopts methods foreign to all the professional practice will find it hard to maintain a high standing with the public.

The practice of competitions, borrowed from abroad, has not as yet taken a very firm hold among us. A moderate effort made at little sacrifice on the part of our leading men; an expression of disapproval by the Institute and other societies; an abstinence from such ventures by the well-established members of the profession, would go very far towards ridding the public and ourselves of such methods altogether, and the final result would be to place our work on the same basis as that of other professions, and to give sterling merit a fair opportunity to find its full reward in due time under conditions alike honourable to both architect and client. Then we could hope that the architect of the future might claim a better title to the name, and become what another has fitly said he should be, "a true artist, a skilful draughtsman, a mathematician, a person endowed with considerable scientific knowledge, a mechanician, an arithmetician, a man of probity, and a gentleman."

## THE REBUILDING OF CASAMICCIOLA.

A COMMISSION of Neapolitan engineers and architects, which has for some time been occupied in considering the best mode of providing for the future of the island of Ischia, has now closed its deliberations, which were approved by the general assembly of the profession. Their investigations were confined to the causes of the great disaster of Casamicciola from an architectural point of view, and to the best method of reconstructing the houses. During the investigation they were much struck by finding in the midst of the ruins a zone of about 300 mètres square which had escaped untouched. There is not the slightest trace of the severe earthquake in this oasis—no house was damaged, and the walls of the gardens are intact. Wood and iron are recommended as the best materials to be employed for rebuilding the houses, and two types of this mode of construction were minutely examined, the one called the "Calabrese," consisting of wood and mason work on walls; the other, much used in America, consisting of iron. Preference was, however, given to the Calabrian type. One thing was decided—that vaulted roofs should be avoided in a country subject to continual shocks. The sum total of what has been collected for the sufferers in Ischia now amounts to 2,735,268 lire, or about 110,000*l*.

**Parkes Museum.**—The following gentlemen have recently been elected by the Council as members of the Museum: The Duke of Bedford, the Earl of Bathurst, Lord Sudeley, Lord Chelmsford, Sir Robert Rawlinson, C.B., Sir Curtis M. Lampson, Sir Trevor Lawrence, Mr. T. W. Evans, M.P., Mr. John Fowler, Mr. H. Tritton, and Mr. Hugh Leonard, M.Inst. C.E. Mr. E. White Wallis, F.S.S., has been appointed secretary in the place of Mr. Mark H. Judge, who has resigned.

**A Roof of Glass and Iron** for the Royal Exchange is being manufactured by Messrs. Whitford, of the Regent's Canal Iron-works, from the designs of Mr. Charles Barry. The cost will be 10,000*l*.



## NOTES AND COMMENTS.

THE session of the Architectural Association will commence under the presidency of Mr. COLE ADAMS, by a conversazione on next Friday, the 26th inst., which will be held at the new galleries of the Institute of Water-Colours, in Piccadilly. The introductory lectures to their courses, by Mr. BLASHILL and Mr. TARVER, will be delivered in the course of the following week.

THE Exhibition of the Scottish Water-Colour Society, which is about to be held in Glasgow, will, in addition to the finished drawings of the members and associates, contain a collection of sketches by them. Many of the sketches being in monochrome, it is intended to have them on white mounts with inexpensive frames. In addition to the novelty and interest of the sketches, the committee expect that they will attract purchasers who may not be able to invest in the more elaborate works of the Society.

ON Monday last the Brussels Palais de Justice was opened, with befitting pomp and circumstance, by the King of the Belgians, in the presence of all the notabilities of the kingdom, while the approaches were blocked by a living mass of enthusiastic spectators. The design, somewhat modified in execution, is due to the architect, M. POELAERT, who died about eighteen months ago. His statue will be placed in the palace, and one of the new streets to be formed in the vicinity of his great work is to bear his name. After the ceremony of inauguration, wreaths of flowers were placed on his grave at Laeken Cemetery by a *cortège* of members of the Société Centrale d'Architecture. The colossal edifice is in the Græco-Roman style, the blue stone of Soignies (Belgium), and the white stone of Comblanchien (France), being mainly employed in the exterior. There are twenty-seven courts and two hundred and forty-seven smaller chambers in the interior, which, owing to the difference of level in the two sides, has two ground floors, with a principal upper floor. The site occupied is over two hectares, or about five acres; and the height from the foot of the steps leading to the main entrance to the top of the dome is 102.62 mètres, or 336½ feet. The total quantity of masonry is 370,000 cubic mètres, or 13,067,100 cubic feet; and the cost is expected to fall very little short of 50,000,000 frs., or two million pounds sterling.

THE damage that is likely to arise to landed property from the construction of outfall sewers, gives opportunity for the exercise of the imaginative powers of valuers. When an injunction is applied for it is astonishing what new qualities are discovered in ordinary fields, and what unlimited capacities they afford for profitable investment. When the sewer is constructed new dangers are created, and it would seem to be the terror of farmers—for, according to the landowners' valuers, property in the neighbourhood immediately deteriorates. A case has lately been decided which suggests the extent to which the damage to land by a sewer can be magnified. The trustees of the Duke of NEWCASTLE'S property claimed 9,960*l.* from the Corporation of Nottingham for injury to the estate through the outfall sewer in connection with the Leen Valley scheme. The case was heard in London before Sir HENRY A. HUNT, C.B. The award has been published, and the damages are put down at 1,616*l.*, or about one-sixth of the original claim. The case is a sample of the opposition which is raised by owners of estates near a town whenever drainage works are projected; but it does not always happen that justice is so sternly meted out to the claimants.

A TESTIMONIAL is to be presented to the Duke of BUCCLEUGH in recognition of the services which he has rendered to Scotland for over half a century. What form it is to take has yet to be decided. A great many suggestions have been offered, as will be seen from the following list: 1. A service of plate, which might become an heirloom in the family; 2. An equestrian statue, to be placed either in Edinburgh or in Dalkeith; 3. A portrait of the Duke; 4. An ornamental monument erected in the open space in Parliament Square, Edinburgh; 5. A tower for the new university buildings; 6. A hall in the new university buildings; 7. Some chair to be

founded in connection with agriculture in the university; 8. An agricultural college, in which practical farming should be combined with scientific research; 9. A great agricultural hall, with some memorial of His Grace to be placed in it; 10. A national portrait gallery; 11. A fund from which grants in aid of such sciences as meteorology, &c., might be made; 12. Wings to the hospitals in Edinburgh and Glasgow; 13. A monument in Princes' Street to correspond with the SCOTT monument. Among all these suggestions the last is the least fitting. Edinburgh owes much of its prosperity to the influence of the writings of WALTER SCOTT, by which a new interest was given to Scotland. His monument deserves to have an unique position. The Duke of BUCCLEUGH is a good landlord, and was the chief promoter of the harbour at Granton, but his flatterers are going too far when they put His Grace on a level with the author of the Waverley novels.

\* MR. JAMES MATTHEWS, architect, Aberdeen (of the firm of Messrs. MATTHEWS & MACKENZIE), was lately invited to become a town councillor, with a view to his subsequent election to the lord provostship of the city. But inasmuch as Mr. MATTHEWS is joint architect for the new harbour offices, it was feared that his candidature would be illegal. The Solicitor-General for Scotland was consulted, and he is of opinion that, while Mr. MATTHEWS might legally accept the appointment of lord provost, he could not occupy the position of chairman of the Harbour Board. The difficulty, however, it was suggested, might be got over either (1) by Mr. MATTHEWS denuding his firm of the contract, or (2) by his declining to become chairman of the Harbour Board, an office held *ex officio* by the provost—that appointment being left to another person. After a consultation with his supporters, Mr. MATTHEWS has announced that he is prepared to stand provided it can be at once and satisfactorily arranged that the Harbour Commissioners accept another as architect in place of his firm, to the effect of completely relieving him of his contract with them, and all responsibility in connection with it.

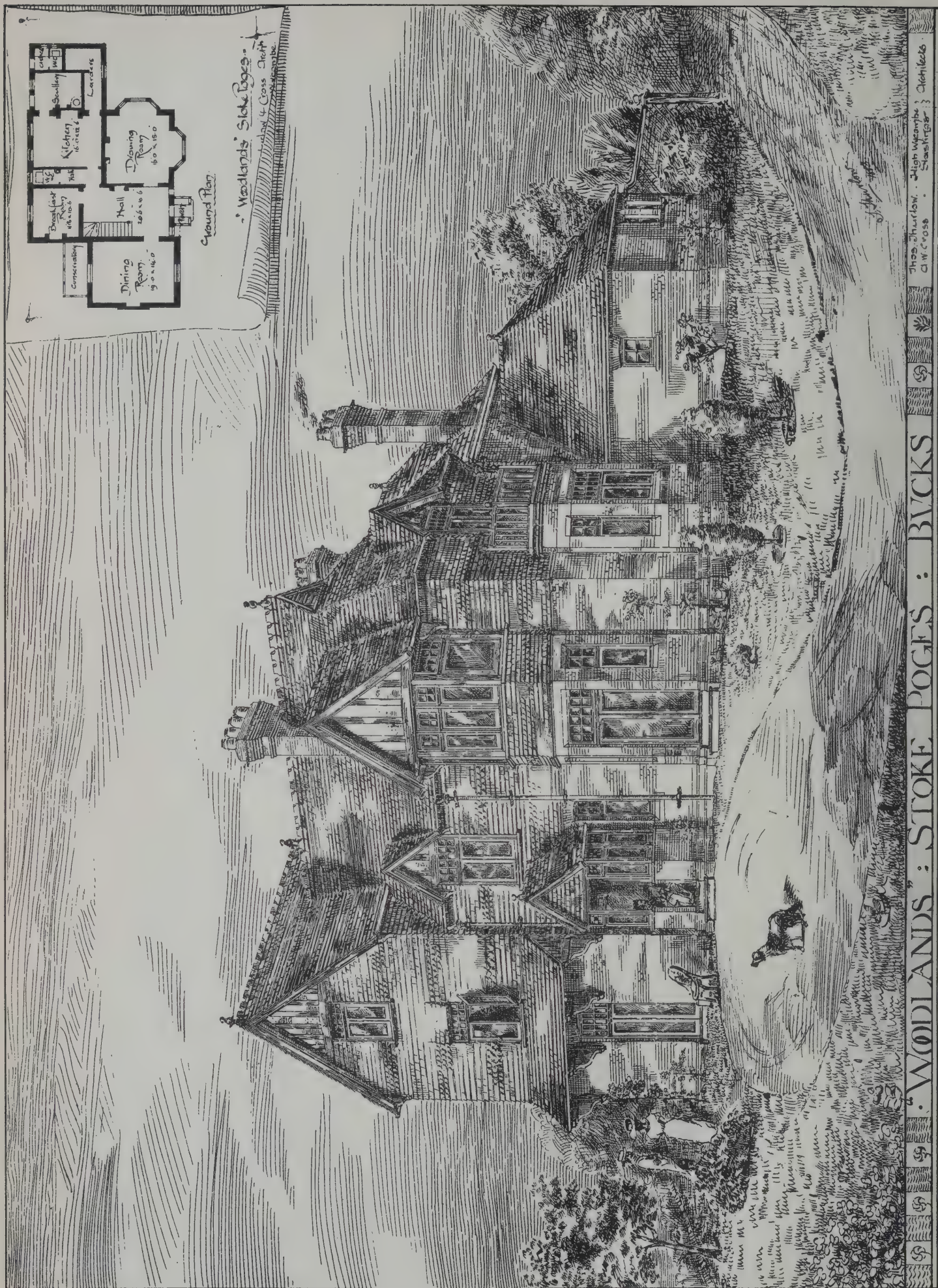
MR. HENRY SUMMERS has prepared a drawing to show the advantages of the St. James's Mount and Cemetery in Liverpool as a site for the proposed cathedral. Although other sites seem to find much favour with the committee, Mr. SUMMERS maintains that the St. James's Mount excels them. The foundations of the building would be on rock, the position is elevated and accessible. If the cathedral were erected there the western front and central spire would tower above the city, and the whole structure be seen from the river and in Cheshire; and, if it could be accomplished that the blocks of property at the west end from St. James's Road to Great George Street, between Washington Street and Alfred Street, could be removed, a splendid approach might be made, with steps and ornamental terraces, with grass plots and fountains, that could not be surpassed for effect. The Cemetery would be only slightly disturbed, and Mr. SUMMERS proposes to convert it into a Campo Santo, in which memorials of eminent citizens might be placed. The sites which are now under consideration are St. John's Church, Kensington Fields, St. James's Mount and Cemetery, Abercromby Square, St. Mary's Cemetery, Cambridge Street, the union of St. Mary's Cemetery with Abercromby Square, Monument Place, and St. Peter's Churchyard.

THE Ben Nevis Observatory, carried out from the designs of Mr. SIDNEY MITCHELL, architect, of Edinburgh, was formally opened on Wednesday. A description of the building was given in a recent number of *The Architect*. A small handbook has just been published with an account of the observatory. Mr. GEORGE REID, R.S.A., has contributed drawings of Ben Nevis from the sea and of the observatory building. Dr. ARCHIBALD GEIKIE has sketched bird's-eye views of the scenery visible from the mountain top, and there is also a map on which the ordnance contour lines have been laid down. Ben Nevis is not the only meteorological station at a high level. America maintains two, namely, Pikes Peak, 14,151 feet, and Mount Washington, 6,286 feet; while France has four, ranging from 3,989 to 12,199 feet, and Italy three, of which the highest is 8,386 and the lowest 7,087 feet. Russia has one 3,787 feet high, and Switzerland two, of 7,505 and 2,875 feet respectively. Hawes Junction is 1,135 feet, and Dalnaspidal, 1,450 feet, while Ben Nevis has an elevation of 4,406 feet.

















Entrance Front.

~ New-House Park ~ Saint Albans.

MANSION  
FOR  
H. GOTT, ESQ

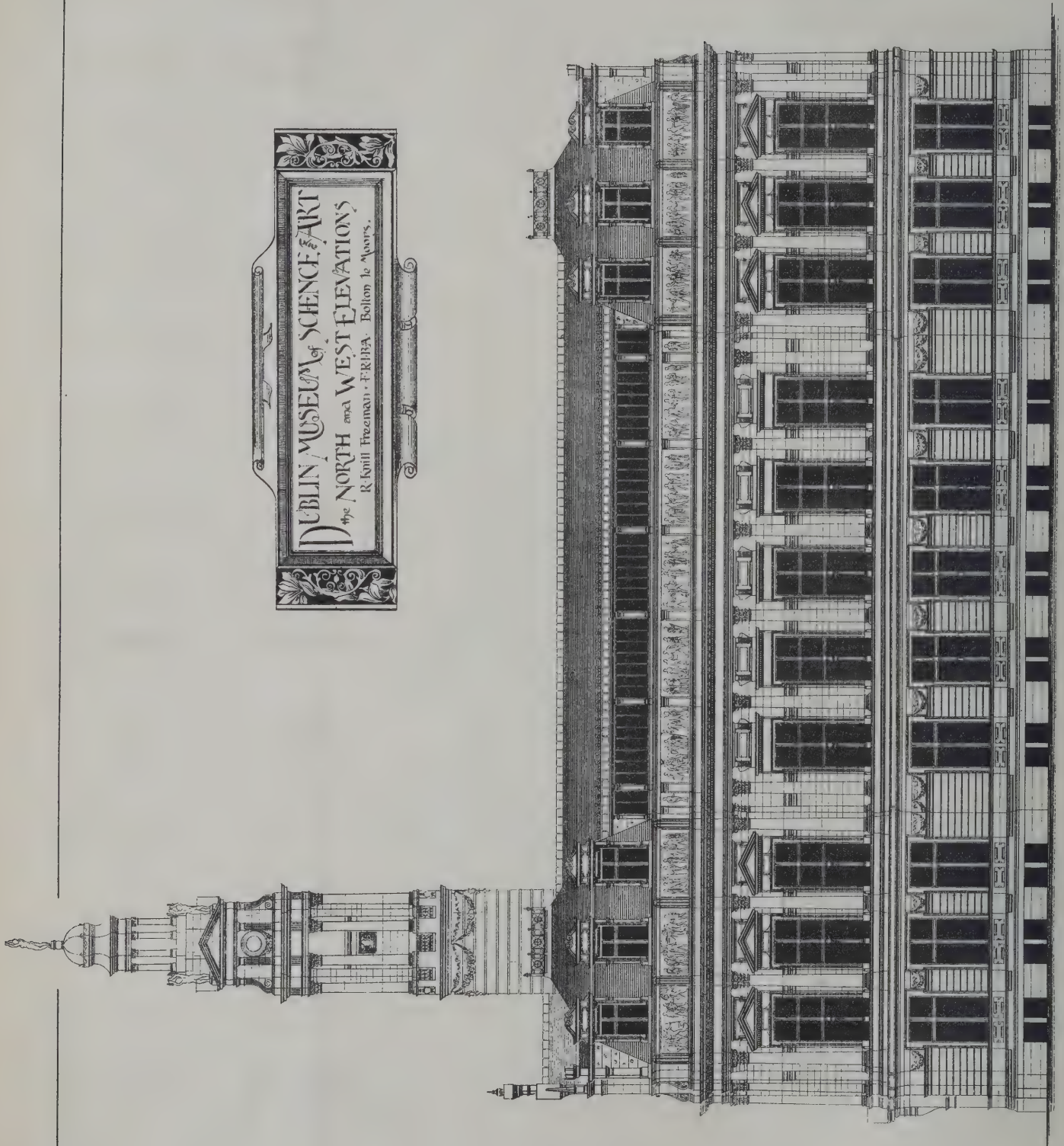
S. C. CAPES,  
ARCHITECT.

Spalding & Co. 23, Mark Lane, London E.C.

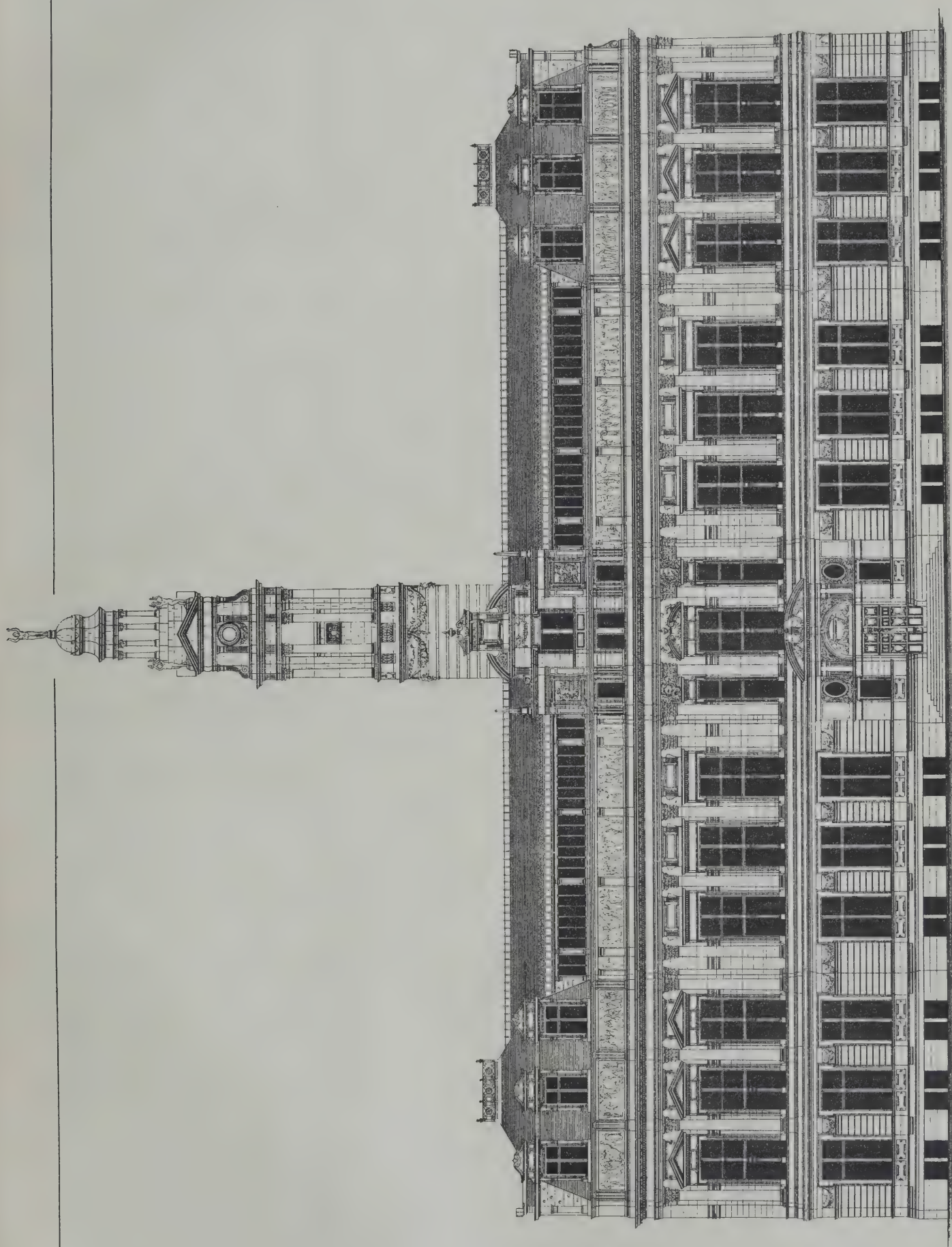












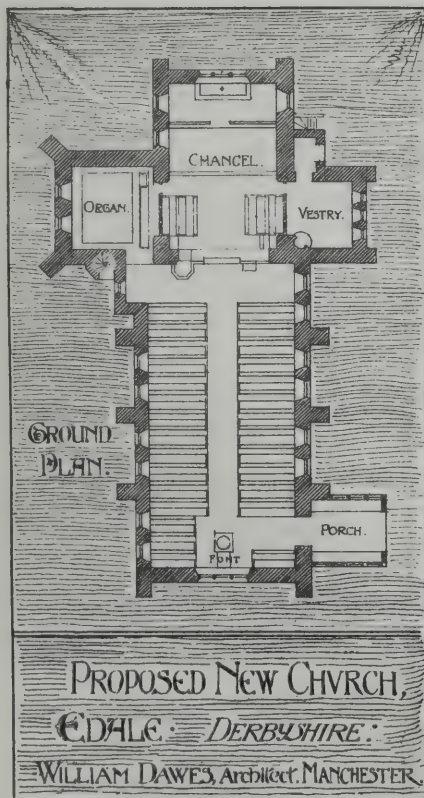
Sprague & Co. 22, Mark Lane, Cannon St. E.C.

PREMIATED DESIGN FOR DUBLIN MUSEUM OF SCIENCE & ART.  
By R. KNILL FREEMAN, F.R.I.B.A.















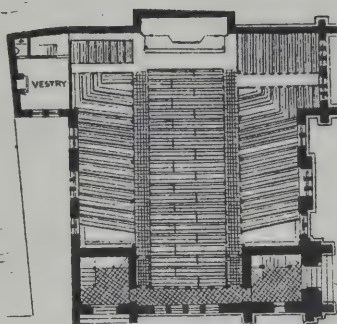
WESLEYAN CHAPEL

in course of

erection

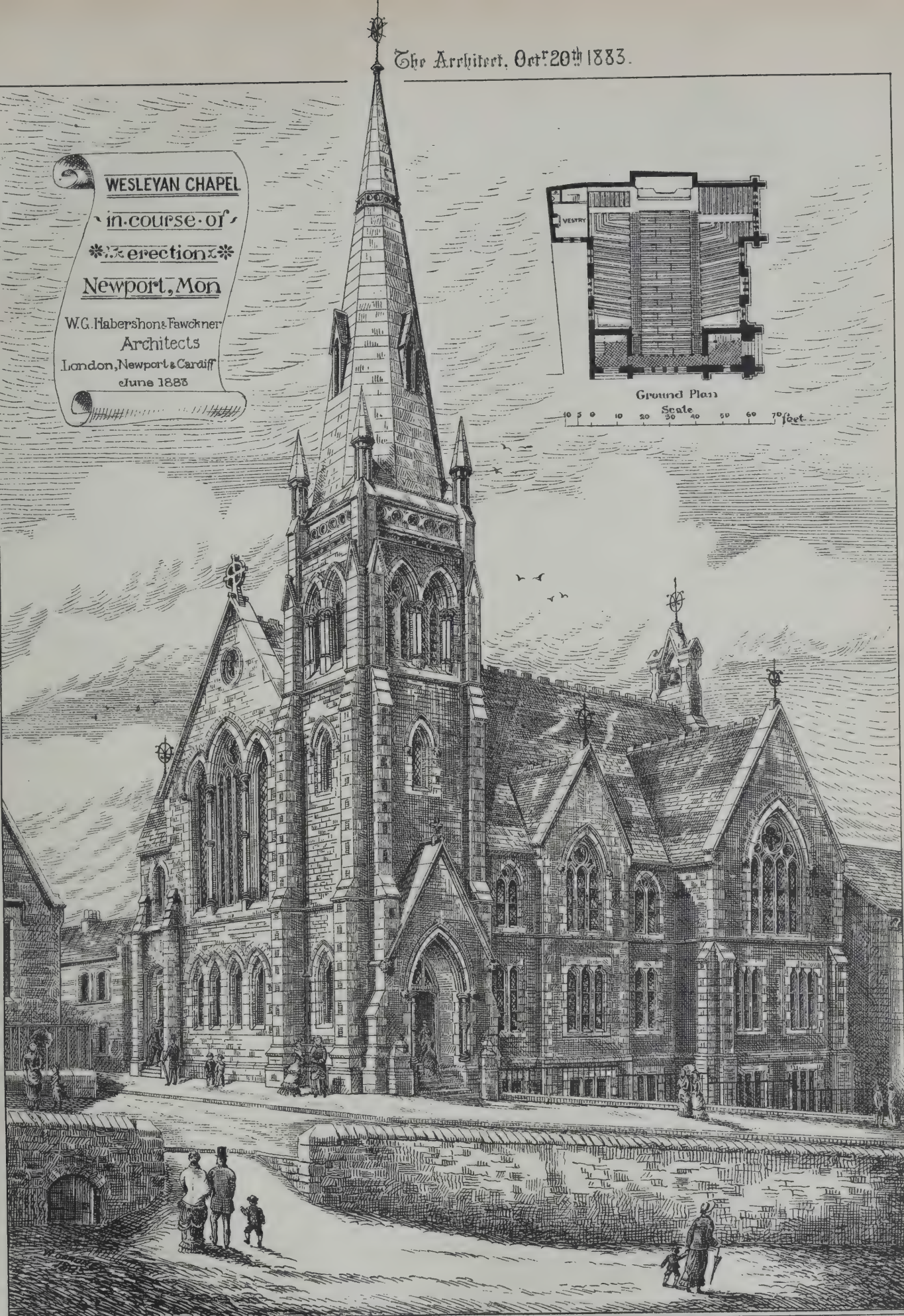
Newport, Mon

W.G. Habershon & Fawcner  
Architects  
London, Newport & Cardiff  
June 1883



Ground Plan

Scale 10 20 30 40 50 60 70 feet



PROSPECT STOW HILL







## ILLUSTRATIONS.

NATIONAL MUSEUM, DUBLIN.

THIS design, by Mr. R. KNILL FREEMAN, F.R.I.B.A., of Bolton-le-Moors, was one of the five selected for the final competition, and premiated. It was recommended for adoption by the committee of selection, and when, in deference to popular clamour in Dublin, the whole scheme was re-opened, a further sum in compensation was specially awarded by the Government to the author.

NEW-HOUSE PARK, ST. ALBANS.

THIS house is situate on the south side of the London road, near St. Albans. The walls are of red brick from NORRIS's brickfields at Hemel Hempstead, and the string courses, panel tiles, &c., from those of Mr. JAMES BROWN at Braintree. The roofs are covered with Broseley tiles, and a bold plaster cove is carried round the eaves of main building. The ground, sloping towards the south, allows of a broad terrace being formed on the principal or garden front of house, having a red brick retaining wall and piers, with Doulton red terra-cotta balusters, and Dumfries stone cappings, plinths, and strings. The whole of the works have been carried out by Messrs. RAYMENT, builders, of Hertford, for Mr. H. GOTTO, from designs and under the superintendence of Mr. S. C. CAPES, architect, of Doughty Street, London, W.C.

WOODLANDS, STOKE POGIS, BUCKS.

THE illustration represents a house recently reconstructed. The dining-room wing was alone left in the demolition of the old premises, and this part has been decorated with tile facings, and otherwise altered to be in accordance with the new portion. The house is pleasantly situated about a mile from Stoke Church of historic fame, in about 15 acres of garden, shrubbery, and meadow land. The bricks and tiles used were obtained from Messrs. GURNEY & HEALEY's kilns, Penn Lands, Slough, and are of good colour and quality. The hall and staircase have been treated in wainscot oak, and the whole of the work has been satisfactorily carried out by Mr. G. ALMOND, builder, of Burnham, under the superintendence of Messrs. THURLOW & CROSS, architects.

PROPOSED NEW CHURCH, EDALE, DERBYSHIRE.

OUR illustration shows the existing building, and also the proposed new church, the former, a barn-like structure, possessing neither beauty nor interest, and ostentatiously out of place among the beautiful scenery surrounding it. The new building will be constructed of stone, and roofed with red tiles. It will accommodate 187 persons. The general arrangement is indicated on plan. Mr. WILLIAM DAWES, of Manchester, is the architect.

WESLEYAN CHAPEL, NEWPORT, MON.

THE Wesleyan chapel in course of erection at Newport, Mon., is being built of local stone, with grey Pennant stone facings and Bath stone dressings and tracery. It measures internally 68 feet long by 53 feet wide, exclusive of transepts. The roof is constructed of pitch pine framing and arcading, supported by iron columns, which also carry framing of gallery. The ceiling will be match-boarded and formed into panels by moulded ribs, with carved bosses at intersections. The gallery front will be of pitch pine framing and iron panelling, rather novel in character. There will be accommodation for 580 persons in the body of the chapel, and 393 in the galleries, making a total of 973 persons. The pewing will be of pitch pine, and the whole of the internal woodwork is to be stained and varnished.

Beneath the chapel will be situated a large school-room, six class-rooms, warming-chamber, and other offices. The contract is let to Mr. C. MILES, builder, of Newport, for 5,484*l.*, and is being carried out from the drawings and under the superintendence of Messrs. W. G. HABERSON & FAWCKNER, architects, of London, Newport, and Cardiff.

**Brechin Town Hall**, which has been erected from the designs of Mr. Alexander Ross, architect, of Inverness, was opened on Tuesday.

## UNIVERSITY COLLEGE, DUNDEE.

(Continued from page 230.)

THE following is the second part of the description of the new University College, Dundee, which has been prepared by Mr. David MacLaren, the architect of the buildings.

**The Chemical Department.**

The chemical laboratory is one of the finest in the kingdom, and has been newly erected at a cost of about 10,000*l.*

*Store and Reagent-Room.*—In the store and reagent-room the students obtain their chemicals and glass vessels. The fittings in this room consist of a set of shelves for the liquid reagents, such as acids, &c., most frequently in use. Across the centre of the room runs an ordinary shop counter over which an assistant serves out glass apparatus to the students as required. This counter is fitted up with a number of drawers and cupboards, storing corks, files, and all the smaller pieces of apparatus used in the large laboratory. There is also a large case for glass vessels. In this room also the assistant prepares the various solutions, and chemicals required for the lectures and laboratory practice; for this purpose a draught-place, sink, and work-table is provided.

*Professor's Laboratory.*—In this room the professor carries out his own experiments and researches; and here also, in certain cases, students engaged in original research will be accommodated. On each side of the fireplace there is a large draught-place, suitable for long trains of apparatus. The ordinary work-tables are arranged round the windows of the south and east walls, and are provided with gas, water, and other conveniences. There are also large cupboards for glass and reagents. There are further arranged on the east wall a blow-pipe, driven by the Root's blower in the engine-room; also, two Bunsen pumps for rapid filtering; and, lastly, in the south-east corner, there are terminals for obtaining a powerful current from the dynamo in the engineering workshop.

*Blow-Pipe and Combustion-Room.*—On the north wall is arranged a series of six blow-pipes, supplied with gas, for the combustion of which a blast of air is supplied to each blow-pipe by the Root's blower, referred to above. By this means the students will be enabled to carry out fusions and other operations where a high temperature is required without the necessity of employing an ordinary bellows blow-pipe, as is usual in most laboratories. These blow-pipes also effect a great saving of time, since it is only in some cases the constant attention of the operator is required. A long draught-place runs the whole length of the south wall of this room, and is fitted up with gas, water, and three air-blasts. Here the student performs those experiments which require the use of a gas furnace, such as organic analysis, determination of carbon in iron and steel by combustion, and other operations of a similar nature.

*Draught Hoods.*—All the draught hoods throughout the building are formed of mahogany, French polished and ebonised, glazed with plate-glass, the front being a sash hung with cords and pulleys. The soles are of slate, grooved, and have waste pipes and gratings, and each hood has a supply of gas and water.

*Balance-Room.*—Here, as the name indicates, are kept the delicate chemical balances which are used in quantitative analysis. In passing it may be said that the chemical balances ordinarily used by the student weigh to the one sixty-thousandth part of an ounce ( $\frac{1}{60000}$  oz.), whilst those used in special experiments weigh even less than that. The balance-room is also fitted up with a small dark closet, in which the students will use a Browning's one-prism spectroscope in ordinary analysis.

*Professor's Room.*—The professor's room is provided with two bookcases of American walnut, a table, and chairs.

*Small Lecture-Room.*—This room is used for small classes, and is more especially convenient when two lectures are given consecutively, in which case the same room cannot be used for both, owing to the necessary pre-arrangement of experiments. This room is fitted up with a small lecture-table, supplied with water, gas, and electric current when required. Behind the lecture-table there is also a blackboard, a cupboard for re-agents, as also screens for diagrams.

*Museum.*—Here are kept the chemical specimens and such permanent apparatus and instruments as are required for illustrating lectures. The fittings consist of three large apparatus-cases, a large space for chemical specimens, also cabinet for minerals and metallic ores, and lastly a specially-constructed airtight cabinet for iron and steel specimens, so arranged as to be perfectly dry, and thus avoid any damage to the specimens by rust.

*Preparation-Room.*—The apparatus required for the lecture experiments is prepared and fitted up in this room. Among the other fittings in the room there are two draught-places for making such gases, &c., as it is necessary to have ready before the lecture commences. There is also a blow-pipe, driven by the Root's blower, for making glass apparatus, and a large copper gasholder for keeping a store of oxygen always on hand. From this gasholder pipes conduct the oxygen gas on to the table in the lecture-theatre, so that it may be conveniently obtained for any experiment at a moment's notice.



**Large Lecture Theatre.**—This room is capable of seating 170 students, the seats being arranged in tiers. The lecture-table, which stands on a platform at the east end of the theatre, is 20 feet long, and when necessary may be lengthened 6 feet. It is fitted up in the most complete manner with gas, water, air blast, powerful electric current from the dynamo in the engineering workshop, also with the supply of oxygen gas, and is further fitted with a pneumatic trough and mercury trough, each of the latter being faced by plate-glass, so that any experiments performed therein are readily visible to the audience. The table has also two down draughts for conducting away any noxious vapours which may be evolved from any experiments performed on the table. The table has also numerous drawers and cupboards for such apparatus as is frequently required during lectures. There is, further, an important series of fittings behind the lecture-table. These consist of two draught-places for the preparation of gases, &c., during the lecture, and of three blackboards, hung with cords and pulleys. Behind the two side ones there are four small cupboards, with glass doors, for keeping the chemicals and reagents used in lectures; the centre blackboard, on being raised, exposes to view a stone arch passing into the preparation-room behind. The object of this is to allow a table (6 feet by 2½ feet), provided with slate top, and running on rails, to be brought forward on to the lecture platform from the preparation-room behind. By this arrangement a furnace or other piece of apparatus, which it is not desirable to have in the theatre during the whole lecture, may be prepared in the room behind whilst the lecture is going on, and only be brought forward when required; or, if necessary, it may be pushed back into the archway, in the roof of which there is a flue conveying away noxious gases, or the smoke of the furnace, &c. When in this position a window-sash can be drawn down from behind the blackboard, and so prevent the entry of any objectionable fumes into the lecture-room, and still not shut out the view from the audience from what may be going on within the archway. The side of the archway next the preparation-room is also provided with a similar window, so that an assistant at that side may watch the course of the experiment and yet not be exposed to any of the noxious vapours which may arise from it. The interior of the archway is fitted up with gas, water, and other conveniences. At the back of the lecture-table, above the fittings previously described, there are four screens for diagrams, each 9 feet by 6 feet, and which are worked by a series of pulleys. Behind the diagram screens there is a large screen, 10 feet square, for use with the oxyhydrogen lantern and the electric light. When not in use this screen is almost hidden from view, but when required may be let down in front of the blackboards in a position convenient for receiving the image of any object thrown on to it by the lantern. The room is lighted by large windows on the south and west walls, and at night the gas-jets of the students' tables are sufficient to light up the laboratory.

**Diagram-Room.**—The space under the higher part of the gallery in the lecture theatre is utilised as a room for making and storing the diagrams used in illustrating the lectures. The fittings of this room consist of a large table, 12 feet by 6 feet, on which the diagrams are drawn; the very large-sized paper used being run off from a roller placed under one edge of the table. The body of the table is fitted with a number of drawers for keeping the diagrams.

**Large General Laboratory.**—Ultimately it is intended that there should be two large laboratories, the one for qualitative analysis, and the other for quantitative analysis; but at present only the latter has been built, and, to begin with, will be used for both purposes. This laboratory is 50 feet long by 30 feet wide, and 29 feet in height to the ceiling, which is semi-octagonal in form, and is lighted from each side and from the roof. The main or principal couples of the roof stand partly out against the roof-lining, and a strong semicircular tie, starting off stone corbels projecting from the side walls, runs round the under side of main rafters. All the exposed timbers of roof are of a selected and beautifully-marked pitch pine. There are eight students' work-tables, each of which accommodates four, so that thirty-two students may work at the same time, besides a demonstrator's table, placed at the north end of the laboratory. The following is a description of the students' tables: Each table, as already mentioned, accommodates four—two on each side. The table space allotted for each student is 4½ feet by 2 feet 8 inches; below his table he has a lock-up cupboard and four drawers for apparatus, besides a long drawer for glass tubing; above his table he has a lock-up cupboard for chemicals, provided with sliding glass doors, and a small closet with draught for his sulphuretted hydrogen apparatus, &c. He has a gas bracket for lighting, and two gas nozzles for attaching Bunsen burners. At each end of each of the students' work-tables there is a small sink supplied with one large and two small water-taps, the latter being used for distilling operations. The demonstrator's table at the north end of laboratory is fitted up in a somewhat similar manner, but is in addition provided with cupboards and drawers for keeping the solutions, minerals, ores, &c., which are given to the students for analysis. Down each side of the laboratory at intervals there are four small draught-places, whilst at the south end there are two, and at the north end the large draught-place for operations which require

greater space than the small ones can accommodate. At the north end there is a niche containing a set of seven small copper drying-ovens heated by steam, and a copper still for making distilled water. At each end of the laboratory there is an ordinary sink provided with hot and cold water. Down the west wall there is a series of shelves for the special reagents; on the east wall there are arranged at intervals six of Bunsen's pumps for rapid filtrations.

**Cloak-Room and Lavatory.**—A cloak-room and lavatory are provided for the use of the students at the south-west corner of the building.

**Corridor.**—The corridor (7 feet wide) extends round three sides, and from it access is gained to all the various rooms. It is lighted by five circular lights, glazed with domed glass. Running along each side of the corridor is a rich border of mosaic tilework, and the centre portion is filled in with a floor of strong cement concrete. There is a stair leading to the flat roof over the corridor, where operations may be performed in the open air.

**Vestibule.**—The vestibule is a feature in the building. The floor is laid all over with marble mosaic, the walls are finished with a pitch-pine dado, and two columns and pilasters with die blocks, bases, and caps are placed at the top of a short flight of steps inside the vestibule. The walls are enriched with an effective cornice, and the ceiling is divided into ornamental panels.

**Basement.**—Entrance to the basement floor is attained by a staircase at the south-east corner of the corridor. The general arrangement of the basement is similar to that of the ground floor. Passing along the corridor northwards there are, first, two store-rooms for glass, then a store-room with pavement floor for acids and other chemicals, beyond which is a fourth room which it is intended in the future to fit up as a metallurgical laboratory. Opening off the north corridor there are the furnace-room, for heating, and coalhouse; there is also the engine-room, containing the Root's blower and a 2 horse-power Otto gas engine. This engine drives the blower and the five ventilating fans which are situated in the large room under the lecture theatre. A small room at the extreme end of the north corridor, fitted with a lathe and a joiner's bench, is used as a workroom for making wood and metal apparatus. Opening off the south corridor we have first a large room, which it is hoped may be fitted up before long as a technical laboratory for dyeing and bleaching. Beyond this there is a room for rough operations provided with two draught-places and a long work-table and gas and water; and still further to the west we have a dark room for photography, photometry, and for more advanced experiments in spectrum analysis. This room is fitted up with work-table, sink, and convenience for obtaining a powerful electric current. The last room in this corridor is used as a lavatory. Under the students' general laboratory there is a large dark cellar to be used as a lumber room. In the centre of this cellar has been sunk a well 17 feet deep, for the purpose of obtaining a 35 feet fall of water—the object of this being to work the filter-pumps in the laboratories above. Among the permanent apparatus with which the chemical department has been provided may be mentioned a set of specimens of the elements and their more important compounds, a good collection of mineral and metallic ores, numerous diagrams, spectroscope, microscope, goniometers, a Bunsen photometer, and a number of furnaces.

**Heating and Ventilating.**—The heating and ventilating are effected on Mr. Cunningham's system. Two inlet air shafts, each 22 feet high, are placed on the north wall of lecture theatre, and conduct the fresh air down to the five air pumps in basement floor. These pumps are driven by a 2 horse-power Otto gas engine, and force the air into the rooms through flues under the ground floor, in which are placed the heating pipes. The fresh-heated air is brought into the room by upright shafts at a height of 5 feet from the floor. The vitiated air is taken off by shafts which extend from within 2 feet of the floor up to the exhaust-flue in the roof. The noxious gases from the draught-places and students' working tables are also conveyed through flues into the exhaust-flue in the roof. The air in the exhaust-flue is discharged through louvre-boarded ventilators on the roof, fitted inside with valves, which prevent any possibility of back draughts.

In the general arrangement of the building the main objects have been (1) to obtain all the principal rooms on one floor—an advantage which is wanting in many of the large English laboratories, and (2) to have all the rooms as well lighted as possible.

#### College Hall.

Free St. John's Church has undergone some slight alterations so as to adapt it for lecture purposes. Where the pulpit and platform stood there is now a lecturer's platform, and a table fitted up with gas, water, sinks, and frames for diagrams, &c.

#### Meter House.

A meter house has been erected against the west boundary wall. There is one gas-meter for the chemical laboratory, and one for the gas engine, and one for water for the whole departments.

#### Workshop.

A large new workshop of two storeys has been erected to the west, and in line of the chemical laboratory. On the ground floor is a forge, a 6 horse-power Otto gas engine, a line of shafting and



working benches for vices, &c. The upper floor is fitted as a joiner's workshop, with the necessary benches, &c.

The whole of the works have been carried out from plans prepared by Messrs. Ireland & MacLaren.

## THE ROYAL COMMISSION ON TECHNICAL EDUCATION.

AN address has been delivered by Professor Roscoe, in the town-hall, Southport. They were aware, he said, that in August 1881, a Royal Commission was appointed for the purpose of investigating the whole subject of this so-called technical education or instruction, not only in our own country, but on the Continent and in other countries—in America, for example. The appointment of this Commission, on which he had the honour to serve, was occasioned by a very natural inquiry as to how far England was in the forefront in the race for knowledge and for its application to industry. It was stated over and over again that our industries were languishing, that we were no longer occupying the position which we had hitherto held, and that this was in consequence of our not attending sufficiently to the proper advancement and spread of technical education from the top to the bottom of the ladder; and the Commission was appointed for the purpose of inquiring how far such statements were true, to point out what was being done in this respect in other countries, and what influence the educational establishments, such as they had them abroad, appeared to exert upon the industries of those countries. The Commission was appointed on August 25, 1881, and in about six months they issued their first report containing an account of their visit to the schools of France, more especially to those schools which were and are still in a great condition of change, namely, the primary, elementary, or national schools of France. It was important for them to do this because they must begin at the bottom, and, before they could understand the institutions in which the special technicalities were taught they must know something of the foundation, and the way in which primary instruction was given. Since then they had visited a great number of places in France, Germany, Austria, Italy, Belgium, and Holland, besides visits which they had paid to the more important centres of industrial and intellectual activity in this country. Without anticipating the report, he might say that it would contain an account of the various schools they had visited; not all the schools, but at any rate a selection of the typical schools, those which they thought it was important the people of England should know something about; and beginning with the schools for the children of the ordinary workman, and going on to the universities and the higher technical schools which each country possessed. The report then would contain a full, and he hoped luminous, and he believed interesting account of what was being done on the Continent. This would be the first part of their report; and the second part would contain a statement of what was being done in England, and of the progress which was being made in this very important direction of scientific and technical education. Then they would have to draw their conclusions and such recommendations as they might be able to make. He thought, therefore, that the report when it came out would really be one which all educationists would look to with interest. He hoped it would not be used entirely for wrapping up pounds of butter, as it was stated that most of the blue-books were used for this no doubt useful but not absolutely the best purpose for which they could be employed. If he was asked what was the general impression on his mind after being abroad and seeing the condition of things, he should say in the first place it was very difficult to estimate the amount of interest and attention that was now being paid to the question of education both of a low and of a high character, both of an elementary and of a technical kind, in all the countries which they had visited. No one who knew France and knew what France was under the Empire and saw what France was at the present moment could doubt that she was making and had made enormous educational progress. But then this did not apply to France alone. It applied equally to Germany, although in the case of Germany the difference was not so perceptible because for a long series of years the Germans had been far in advance of any other nation, perhaps Switzerland excepted, in the amount and systematic character of their regular national education. The next point which struck one was not only the great activity but the personal interest which was taken in the subject by both masters and men, more so, he was afraid, than was at present the case in England. Then another point which struck every one who knew anything about Continental education in opposition to what was the case in our own country was the fact that the State and the municipality bore a very much larger share in the working and, what was an equally important matter, the payment of those establishments than was the case in England. On the Continent, from the top to the bottom, education was assisted by grants from the central government, from the municipality, and from often the departmental government. This was not the case in England; perhaps in time it might be so, and he trusted it would be. He

hoped the time would come when more would be done for education by the State and the municipality, and when voluntary effort would be as great or greater than it was now. With regard to France, it was pleasing to note the great interest that was taken in education by the upper classes. Time was when no one took any interest in the schools, but now an interest in education had permeated the whole French nation, and they saw more than ever the necessity of education. What effect, it might be asked, had all the teaching that was going on upon the Continent upon the industries of this country? There again they met with a great many difficulties, and it would be extremely difficult and perhaps impossible for him to give them any satisfactory answer. We in England had stood, and he most firmly believed still did stand, in the forefront of the industrial countries of the world. Why had we obtained this position, and how could we preserve it? We had attained it first of all because, he believed—he supposed they might flatter themselves—there was something after all in an Englishman. That he most certainly for one was happy to believe. Our insular position and our mineral wealth had contributed also very greatly to the attainment of our present position. In consequence of these things and having that dogged perseverance and that power which after all, as he said, belonged to an Englishman—for we had accomplished both in science and industry that which other nations never had and never would—we had attained to our present position. Progress in educational matters had been made on the Continent, and he was glad to know that in England we had not been standing still. We were making rapid progress all along the line, beginning with our elementary schools up to our universities and the highest technical schools. It ought not by any means to be supposed that the technical schools were intended to take the place of workshops. What was wanted was to teach people the principles underlying their industries, and to instruct the master to thoroughly understand the details of his business whether scientific or artistic, and the principles on which it was based, in order that he might be able to take immediate advantage of those discoveries in science which had a practical bearing, and upon the successful adoption of which the future prosperity of our country so greatly depended. Whilst much remained to be done, and whilst we were as a nation much behind Continental nations in the means which we at present possessed, and in the general attention which was directed to this subject, it was satisfactory to feel that England was awakening to the necessity of placing the education of her leaders of industry on as scientific a footing as had been accorded for generations to the instruction of the so-called learned professions of law, physic, and theology.

## HOW TIME-SHEETS ARE MADE OUT ON ORDNANCE WORKS.

A COURT-MARTIAL was concluded last week at Sheerness which had occupied several days. The prisoner, Samuel Ichabod Rayner, a Quartermaster-Sergeant of Royal Engineers, was arraigned on seven distinct charges of having, while foreman of the Royal Engineer Works at the Isle of Grain, fraudulently certified that certain artificers, excavators, and labourers, for whom wages were claimed in the contractors' bills, were employed on such works for certain specified times, well knowing such statements to be false, thereby, in some of the cases, defrauding, and, in the remainder, intending to defraud the public of various sums amounting in the aggregate to upwards of 130*l*. An eighth count charged him with having knowingly made a fraudulent statement that a bricklayer named Catling, and a labourer named Green, worked on an improvement to the ventilation of the magazine at Grain Fort for fifteen hours, which was false, with intent thereby to defraud the public of the sum of 7*l*. 18*s*. 6*d*. The prisoner, who has been under arrest since August last, was foreman of the Royal Engineer works at the Isle of Grain, and it was his duty to record the time worked by the contractors' men. According to the case for the prosecution, the fraudulent statements consisted, in some instances, of returning certain artificers and labourers as having been employed for a considerable number of hours in excess of the time they actually worked; in other instances, of claiming wages for the execution of certain works by men who were returned as having been employed at the same time on other works—the men's time, in fact, being charged twice over—and, in further instances, of charging time and claiming wages for men who, as a matter of fact, were not employed at all during the period in question. One of the principal works was the sea wall at Grain, and it appeared that in connection with these three or four men were returned week after week as having been there employed upon that work, whereas they were not there at all; two of the men in particular had gone away from the neighbourhood and enlisted in the army. The greatest aggregate number of hours falsely returned in this way for one man was about 1,000 hours. Another branch of the alleged fraudulent returns by prisoner was that of returning labourers at work in assisting artificers, whereas the assistance was rendered by Gunner Phillips, and no labourers were employed—full wages being claimed for the labourers, while a nominal sum



was privately paid to Phillips—or the assistance was rendered by labourers who were returned as having been employed on the sea wall, their time being thus charged twice. It appeared that the prisoner had seen over twenty years' service; that he had risen to the highest rank to which a non-commissioned officer could attain, and he would in the course of a few months have been entitled to a pension of 2s. 9d. per day. Colonel Le Mesurier said that, apart from these charges, he could give the prisoner as high a character as he could give any non-commissioned officer. The finding of the court and sentence will be reported to the Horse Guards and promulgated in due course.

### THE OXFORD COLLEGES.

THE *Oxford Chronicle* gives the customary description of the work which has been undertaken at the colleges since last year. In other parts of Oxford it appears that "although some important works are in progress, the erection of new buildings has not been upon so large a scale as in several preceding years. House property, especially in the outskirts of the city, appears to be a drug in the market, and the number of dwelling-houses without tenants is larger probably than at any former period."

Good progress has been made with the Indian Institute which is being erected at the corner of Broad Street, and the memorial stone of which was laid by the Prince of Wales in May last. The style of the building will be that commonly known as Jacobean. The angle formed by the junction of Holywell with Broad Street will be occupied by a turret surmounted by a lantern, which will contain the principal staircase leading to the basement below and to the library and museum above. On one side of this turret, facing Broad Street, will be the main entrance. The whole of the first and second floors towards Broad Street will be occupied by the library, which will, when completed, have a series of five oriel windows, while the upper floor will have the same number of smaller windows lighting the galleries. The front towards Holywell Street will be broken up into parts by two projecting features, which are intended to obviate the awkwardness of the site. The material throughout will be of Milton stone. The roof timbers are already being put on, and the building is expected to be opened in March. Mr. Basil Champneys is the architect, and the builders are Messrs. Symm & Co.

The repairs in the interior of the quadrangle of the Bodleian Library and the Old Schools were begun in June 1882, under the direction of Mr. T. G. Jackson, architect for the Curators of the University Chest, and are as follows: The old stonework was very much decayed, and where it is replaced Clipsham stone has been used. There are twenty new pinnacles, and a lightning-conductor is fixed to each. The parapet walls, of which there are twenty-one between the pinnacles, are all renewed, and the copper and lead gutters with flashings are made good at the back of them. The cornice on the north, south, and east sides is renewed, with the carved bosses, which have been carefully copied from the old ones, that were too far decayed to be refixed. There are thirty large four-light windows on the north, south, and east sides, and twenty-four smaller windows in the four corner wings, which are more or less restored with new sills, jambs, and mullions, and the lead glazing made good. Ten of the doorways have been restored, as also has the greater part of the basement with much of the ashlar in the walls. The west side with the two wings of the Bodleian Library wall, are panelled, and much of it is being restored in the two upper stages. The large centre window has the jambs and mullions renewed on the outside. The old lead stack pipes have been made good and refixed, and the library floors ventilated. Proper soil and water drains have been laid to convey the water from the roofs and surface and building in the quadrangle, and connected to the main drain near the corner of Brasenose Lane. Messrs. Symm & Co. are the builders; Mr. McCulloch, of London, did the carving in an excellent manner; and the work has been carried out under the able supervision of Mr. Wm. Burgess, as clerk of the works.

The important extensions at Magdalen College, which have been in hand for about two years, are now almost completed. The façade in the High Street is nearly 200 feet in length, and the west wing extends 114 feet northwards at right angles to it. The entrance to the new buildings is under the tower at the east end, which rises some 80 feet from the ground, and harmonises in effect with the "Founder's tower." St. John's Quad will now embrace the whole of its former site and the ground up to the new buildings. At either end of the High Street front are two boldly-designed oriel windows on each storey, and the other windows along the front are similar in character to those in the old building. The sitting and bedrooms are mostly 15 feet by 12 feet 6 inches, with a height from floor to ceiling of nearly 11 feet, while the fellows' rooms are larger. The lecture rooms, of which there are two, are on the ground floor, and are panelled to the height of about 10 feet. Messrs. Franklin & Son, of Deddington, had the contract for the work at 36,000*l.*, and have carried out the designs of the architects, Messrs. Bodley & Garner, of London, in a thoroughly satisfactory manner. The stone used

is from the Deddington and Taynton quarries, except that for the carved work, which is Ancaster stone. New hydrants have been fixed in different parts of the buildings, and new iron doors and casements, which are fireproof, placed to the muniment rooms. Improved sanitary arrangements have been made, besides general repairs in the college, the work being carried out by Mr. George Castle.

The important additions to Brasenose College have been completed and handed over to the authorities. The new buildings take the place of two slightly-built and not well-planned constructions, formerly standing in the kitchen or cloister quadrangle. By their removal, and that of some cottages and outbuildings, a spacious quadrangle, bounded on the east by the ante-chapel and cloisters, and on the west by the new wing, which is set a good way back, has been formed in the place of the old confined and irregular space. To the south the new quadrangle is only separated from High Street by the houses and shops facing that street, and the buildings now erected form part of a scheme for the quadrangle which will extend the whole distance from the old Brasenose buildings to High Street, and add one more to the series of collegiate and academical buildings with which the street is lined. The building contains twenty-two sets of rooms for undergraduates, two large lecture rooms, and a spacious set of rooms for a fellow. The old plan of disposing the rooms on separate staircases has been followed, but various conveniences in the way of sculleries and servants' offices are provided, which were unknown or disregarded when the older college buildings were designed. The foundations are laid at a depth varying from 14 feet to 20 feet, being the depth of the "made" or artificial earth for the most part within the ancient limits of the city. It is remarkable that even as early as the middle of the fifteenth century, when the kitchen of the adjoining college of Lincoln was built, the depth of made ground was not much less than it is now, as has been discovered by the exposure of the foundations of that building during the works in progress at that college. In the soil that has been removed at Brasenose, a great variety of relics of the past were found, consisting chiefly of pottery, coins of no great value, old knives, wig curlers, and tobacco pipes, some of which date from the introduction of tobacco. In order to gain space enough for the new building it was necessary to demolish the greater part of Amsterdam Court, which occupied the site, and preserved the name of Amsterdam or Broadgates Hall, one of the numerous academical halls with which Oxford abounded during the middle ages, and especially before the existence of colleges. Broadgates Hall is said by Ingram to have been a place of some importance, which preserved till the Reformation the privilege of sanctuary for petty offences, and even manslaughter, and was finally pulled down in 1661. The cottages which occupied its site contained a few traces of work at least as old as that time. One of the fireplaces has been refixed in the basement of the new building, where also are several fragments of twelfth and thirteenth-century work, which were found built into the cottages as ordinary walling stone. The walling of the new buildings is of Headington rubble, faced with Gibraltar rag stone, with dressings of Clipsham stone for strings, sills, weatherings, and mullions, and hard Douling for the rest. The durable flagstone of Castlehill, near Thurso, will be used for the landings, and the stairs will be of hard Portland. Mr. Meekford was the clerk of the works. The contract for the building has been carried out by Messrs. Symm & Co., of Oxford.

A very considerable amount of work has been done at Merton College during the Long Vacation. St. Alban Hall has been added, and the two quadrangles connected by massive and effective archways, the difference in the level of the two quads being well arranged by a slight incline in the floor which passes under the Warden's Gallery. The kitchen and other offices used by the Warden in Merton Quad have been made into undergraduates' rooms, and the Warden's new kitchen and other offices have been formed in the rooms formerly used by undergraduates on the south side of St. Alban Hall. The tradesmen's door to the Warden's House is now from Merton Street, through a passage taken out of the Fellows' Garden, which can be approached without going through the college quads. The best Taynton ground stone has been used for this alteration. The work has been entrusted to Messrs. Symm & Co., of Oxford.

The stone-work of the south bay window of the Christ Church dining-hall has been restored in Taynton stone, and a new stained-glass window inserted. A considerable amount of sanitary work has been executed under the supervision of Mr. Griffiths, sanitary engineer, of London. Three spacious lecture rooms have been formed on the first floor of the old library. The builders entrusted with the work were Messrs. Symm & Co.

A considerable part of the stone-work of the north side of the large quadrangle of University College has been refaced by Messrs. Symm & Co.

Messrs. Knowles & Son, of Holywell, have restored and re-cased the front of the main tower of Lincoln over the entrance-lodge with Bath stone from the Combe and Down quarries. About a dozen chimney-stacks have been taken down and rebuilt, and in each case lined with fireclay pipes. The buttery and cellars have been thoroughly rearranged.

The library and rooms north of the All Souls' tower have been



recased and restored in Box ground stone, to match the existing work under the superintendence of Mr. George Young, the college surveyor, at a cost of 1,200*l*. The main drainage system of the college has also been thoroughly overhauled under the supervision of Mr. Griffiths. Messrs. Knowles & Son carried out the work.

Messrs. Knowles & Son have removed a lot of old oak panelling in several sets of rooms in the back quad of New College, which has been replaced with ordinary plaster.

Mr. Curtis has continued the work of restoring the gables on the south side of the quad at Oriel College.

General restorations have been carried out by Mr. George Castle at Corpus. A new lecture room has been formed in the fellows' block. This work has been done by Messrs. Symm & Co.

The whole of the interior of the two staircases on the south side of the outer quad at Jesus have been entirely removed. The old rooms were inconvenient in many respects, were almost worn out and in a dilapidated condition. Several of the old partitions have been removed, and nine sets of rooms have been rearranged in a very excellent manner. New windows have been put in, and water pipes laid throughout. The new staircases are of solid teak, with oak rails and posts of a very substantial character. At the back of the inner quad some requisite sanitary additions have been carried out in an efficient manner. The whole of the work has been executed by Messrs. Franklin & Son, of Deddington, from the plans of Messrs. Bodley & Garner.

### THE ROMAN OCCUPATION OF BRITAIN.

THE first of a series of lectures on "The Roman Occupation of Britain" was delivered on Monday in Edinburgh by the Rev. Dr. J. Collingwood Bruce, who holds the office of Rhind Lecturer for the present year.

Dr. Bruce said that when they thought of the important position which the British Empire held among the nations of the earth, the mighty influence which it exercised over the whole family of mankind, the inquiry into the mode in which it first rose from obscurity became an interesting one. The voyager who first revealed to the inhabitants of Europe the existence of our little island was Pytheas, of Marseilles, who flourished about the year 330 B.C., and was contemporary with Alexander the Great and Aristotle. As the Carthaginians jealously concealed from other people the places where they obtained their supplies of tin, the merchants of Marseilles, who were desirous of sharing in the trades, sent Pytheas, a mathematician of eminence, upon a voyage of discovery. His main object was to find out the Capsiterides, or the tin islands, on the north-west coast of Spain. He was, however, directed to proceed as far as his judgment prompted and circumstances allowed. Sailing out of the Mediterranean, and skirting the coasts of Spain and France, he reached Britain. He appeared to have arrived in Kent in the early summer, and to have remained in the country until after the harvest. He saw in the southern district abundance of wheat in the fields, and he told them also that the natives made a drink by mixing wheat and honey—a drink against which the Greek physicians warned their patients, as "producing pain in the head and injury to the nerves." Leaving the Thames, he sailed by the east coast of Britain to the Shetland Isles, and thence, by the coast of Norway, as far as the Arctic Circle. On his way back he visited Britain a second time. This voyage was an adventurous one to have been made at so early a period. Two results of the visit of Pytheas to England, as Mr. Elton remarked, might be traced—doubtless he learned something about the tin trade, and he was probably the originator of that commerce in the metal which was established soon after his time on the route between Marseilles and the Straits of Dover. Again, almost all the earlier British coins were modelled on Greek money of the age of Philip of Macedon and Alexander the Great, though, as time went on, they departed more and more from the excellence and correctness of the original. The existence of these coins gave confirmation to the probability that Britain at this period was brought into connection with some Greek colony. Cæsar had been understood to say that when he visited Britain the use of coined money was unknown. The passage in which that statement was made was believed to be corrupt. Mr. Evans, in his work on coins, remarked that if the art of coining was unknown in Britain until the time of Cæsar, the coins must either have been struck on the Roman model or that of the later Gaulish coinage, in which nearly all reminiscence of the original Macedonian types had been lost, and which showed unmistakable signs of Roman influence. Although Britain was thus revealed to one portion of the Continent when the Macedonian empire was still in its prime, the people of Rome seemed to have regarded its position as inaccessible, and its very existence as a matter of mystery and dread. The history of its original discovery had been lost and obscured by fable, and of that circumstance the great Julius skillfully availed himself. After a sketch of the position of the Roman empire, B.C. 56, when Julius Cæsar resolved to bring the Roman eagles face to face with the Britons, the lecturer said that, owing to the altera-

tion in the coasts, it was difficult to say precisely from what point of the French coast Cæsar took his departure, and where on the British shore he landed. It was probable that Wissant, near Cape Grisnez, was the point of his departure, and that the coast near Deal was the place of his landing. The leading incidents of the familiar narrative of Cæsar's landing were next recapitulated, a short extract being read from the Commentaries of the difficulties which he had to face, and the manner in which these difficulties were overcome. These extracts, said the lecturer, showed that the occupants of the British soil in that day were not the wild untutored savage people that were generally pictured. Their cornfields showed that they knew and practised the arts of peace, and the construction and management of their chariots proved that they were skilled in the arts of metallurgy, and no mean mechanics and tacticians. It was noted that among the trophies of Cæsar's second campaign were some British pearls, which in the form of a breastplate were presented as an offering to the goddess Venus. Cæsar after his death was no longer regarded as a tyrant, but as a god. On a bronze coin struck in the time of Augustus—a drawing of which was exhibited—they had the radiated head of Julius on the obverse, the legend "Dives Julius," and the portrait of Julius himself. On the reverse was the unlaureate head of Augustus, with the simple legend "Cæsar Divi Filius"—Cæsar, son of the god. That coin, as it circulated no doubt largely among the populace, would plead his cause most powerfully. Coins might be made the means of instruction. In these modern times their usefulness was overlooked. Tiberius—by whose authority, though he knew not of it, our Lord was put to death—was too much occupied in the indulgence of his base passions to concern himself about Britain. Dr. Bruce exhibited—and great interest was taken therein—a denarius of Tiberius, the penny that was shown to our Saviour. On the obverse was a portrait of the Emperor and the legend, "Tiberius Cæsar, Divi Augusti Filius Augustus" (son of the god Augustus), and on the reverse was the figure of his mother Julia in the character of the goddess Ceres, and the legend "Pontifex Maximus" (Great High Priest.) That, said Dr. Bruce, holding up the penny, might have been the coin that was put into the hands of the Saviour. They could not prove that it was not. It was strange that the man by whose authority "Our Great High Priest" was put to death should by his coinage throughout the whole civilised world proclaim himself to be the Great High Priest. The expedition against Britain in the time of Claudius, A.D. 43, was next referred to, and a graphic sketch given of the character of the army which was commanded by Aulus Plautius. This army consisted of about 24,000 legionary troops, and of 45,000 auxiliary troops, including cavalry—making together 70,000 men. That high figure, with the character of the generals sent, said much for the bravery and the military skill of the inhabitants of Britain at this early period. The Roman historians did not tell where this large army disembarked. That was of little consequence; but it was natural that their operations would commence in the middle of the south coast, which it was their business to take possession of. At Chichester there was a suitable landing-place, and there also was still existing a Roman inscription belonging to the period of which they were now treating. It recorded the erection of a temple to Neptune and Minerva, in honour of the Imperial Family, by Cogidunus, a native prince, who had received from Claudius the right of Roman citizenship, and the rank of Imperial legate. Tacitus, in his "Life of Agricola," and the lettered stone illustrated and confirmed one another in regard to Cogidunus. The stone was now at Goodwood, and it had been asked how many of the thousands who went there at a certain season of the year ever paused to read and ponder upon this inscribed stone, which contained so early a record of the events of their beloved country. At Winchester an altar had been found, which was now in the British Museum, dedicated to the "Mothers" of Italy, Gaul, Germany, and Britain—*i.e.*, the mother goddesses of the men of which the main body of the army was composed. In the triumph which followed upon the success of the Roman armies, the title of Britannicus was conferred upon the young son of the Emperor, and for the first time Britain was named in the coinage of the Empire. Some gold and silver pieces had come down to their time bearing on the reverse side a triumphal arch, on which was inscribed the words *De Britannis*. A splendid triumphal arch was erected to the Emperor, the remains of which in the sixteenth century still spanned the Corso in Rome. A fragment of the inscription—about one-half which was attached to this arch—was now preserved in the wall of a terrace near the Barberini Palace. It consisted of a huge marble tablet, the inscription being formed of inlaid letters of brass of a large size. The inscription was as follows, the missing portion having been conjecturally supplied:—"To Tiberius Claudius Cæsar Augustus, High Priest, possessed of the Tribunitian power for the 11th time, Consul for the 5th time, Emperor for the 22nd time, Father of his country, the Senate and Roman people dedicate this arch, because without any loss he subdued the Kings of Britain, and for the first time brought the outermost nations of the globe into subjection." The resistance of Caractacus and of Boadicea to the Romans was next successively referred to; and a notice of the extension of the limits of Roman occupation northwards under Vespasian brought the lecture to a close.



## BURNT AND RAW SIENA.

THE report of Consul-General Colnaghi refers to the preparation of the Siena earths, which are largely used for pigments. "Terra di Siena," or "Terra Bolare e Gialla," known also under the names of ochre, bole, umber, &c., are considered by some mineralogists to be ferruginous clays, by others minerals of iron. They are chiefly found in large quantities in the communes of Castel del Piano and Arcidosso (Monte Amiata). The yellow earths and bole found on this mountain are true lacustrine deposits, found amid the trachytic rocks, of which it is principally composed. They lie under, and are entirely covered by, the vegetable soil. Varying in compactness and colour, they are termed yellow earths when of a clear ochreous tint, and "terra bolare," or bole, when of a dark chestnut colour. Each deposit consists, for the greater part, of yellow earth, beneath which bole is found in strata or small veins. The mineral being very friable, its excavation is easy, and is generally conducted in open pits. The different qualities are separated during the process; the bole, which has the higher commercial value, being the more carefully treated.

After the first separation the bole is further classed into first, second, third, and intermediate qualities—"boletta," "fascia," "cerchione," &c. Its most important characteristic is termed, in commercial language, "punto di colore," or tint. The value of the bole rises as its tint deepens. Thus bole of the third quality is lighter than that of the second, and the second than that of the first. After No. 3 comes the "terra gialla."

The yellow earths, after excavation, are exposed to the open air for about a year, by the pit side, without classification. The bole, on the contrary, is placed in well-ventilated storehouses to dry for about six months. This diversity of treatment is owing to the fact that exposure to the elements brightens the colour of the yellow earths and raises their value, while it would damage the bole, by turning its darker tint first into an orange yellow, and, if continued, into an ordinary yellow earth. It also loses in compactness and crumbles up under exposure.

In addition to the "punto di colore," the size of the pieces influences the commercial value of the bole, which increases with their volume. Thus the classification is "Bolo pezzo," "Bolo grapolino," and "Bolo polvere." The yellow earths are classed as "Giallo in pezzi," "Giallo comune," and "Giallo impalpabile," but in these cases the impalpable is worth more than the common yellow.

The production of the Siena earths may be calculated at about 600 tons per annum, of which sum 50 tons are calcined, and the rest sold in their natural condition. The value of the trade may be estimated from 100,000 to 150,000 lire. A company (limited), for the working and sale of the yellow earths and bole of Monte Amiata, was formed at Siena in 1872, with a capital of 100,000 lire.

## THE NEW PATENTS ACT.

ONE of the subjects considered in his address by Mr. J. E. Bristow, president at the annual meeting of the Incorporated Law Society at Bath on Tuesday, was the Patent Act which was passed in the last session. Mr. Bristow said that the law relating to patents has for the last thirty years been regulated by the Patent Law Amendment Act, 1852; and, although subject to many imperfections, it has on the whole worked fairly well. There were certain defects which experience detected, and which, in common with suggestions for improvement and demands for total abolition, have been discussed in the reports of no less than three Parliamentary Committees and a Royal Commission, which have during that period had the subject of patents under consideration. Besides these reports, many abortive Bills of varying degrees of merit have during that time been brought before Parliament for amending the Patent Law, and among them one of great merit introduced by the late Sir John Holker when Attorney-General in 1879. It is very curious to note how the feeling of the public and our legislators towards patents and patentees has varied during the last thirty years. At one time, some fifteen years ago, so great was the outcry against patents, that it was predicted that the day was not far off when this branch of our legislation would be wiped out of the statute-book. Except among inventors themselves, and those who like myself have been brought into intimate relations with them, there seemed a general consensus of opinion that inventors were a nuisance and patents injurious to the public interest. But to see how completely public opinion has come round upon this subject we have only to turn to the speech of the President of the Board of Trade in the last session, in introducing his Bill into the House of Commons, when, in referring to that class whose interest it was part of the object of his Bill to protect, he said—"An inventor was a person to be encouraged and not repressed. He was a creator of trade, and accordingly they (the Government) desired in every way in their power to stimulate his inventive capacity." Approaching the subject in this spirit, the Government have passed an Act which is in many important respects a great improvement upon the Act of 1852, and which, while it confers very substantial benefits on the patentee, does not

fail to take care of the public also, in the reasonable restrictions which it imposes upon inventors, and the provisions it makes against patents being used for obstructive purposes only. An entirely new departure, and one as to the working of which many doubts have been entertained, is the substitution in place of the Commissioners who were appointed by the Act of 1852, of a controller to be appointed by the Board of Trade, and who, subject to a right of appeal to the law officers, will have the entire management of the working of the Patent Office. It was thought by many persons, and especially by the council of the Society of Arts, who themselves brought in a Bill last session, some of the provisions of which have been embodied in the Act, that the office of controller and the staff provided by the Act would not adequately meet the requirements of the case, and that there ought to be a highly-skilled body of commissioners to whom should be delegated all matters relating to the granting, amending, and prolongation of patents. It was even suggested that this body should be entrusted with the control of patent actions. This suggestion, however, found no favour with the public or the Board of Trade, and was severely commented on by one of Her Majesty's judges, and was abandoned almost as soon as made; but the Act provides that the court on the trial of a patent case may call in the aid of a specially qualified assessor. Probably this will afford as good a tribunal as can be desired for dealing with matters requiring a combination of legal and scientific knowledge. The President of the Board of Trade stated distinctly that the Government could not recommend the expense necessary to pay highly-skilled commissioners, and it was admitted on all hands that unless the commissioners were of the highest attainments, their appointment would be useless. The Act contains new provisions relating to certain preliminary examinations of a formal character before a patent is granted; but the Board of Trade declined to adopt the suggestions that examination should be made in the question of novelty, and whether the invention was the proper subject for a patent. The reasons of the Government for refusing to adopt the suggestions seem to be conclusive. They pointed out that an examination into novelty to be effectual must be costly; that it could only be of practical use in cases where the validity of the patent was disputed; and that the proportion of patents where such a dispute arose was very small, so that practically it would be saddling every inventor with a great expense, which, in the majority of cases, would be unnecessary. The same objections apply, though certainly in a less degree, to an inquiry into the question of subject matter, which it was submitted ought, in justice to the patentee, to be made before he paid his money for a patent, which it might hereafter turn out the Crown had no power to grant. You are probably aware that the American practice is to examine not only into subject matter but into novelty also. This examination causes an enormous amount of expense, delay, and vexation to inventors, which, as far as I can judge from the information I have been able to gather on the subject, more than counterbalances any advantage which the patentee may obtain from the ordeal he has to undergo. For, be it borne in mind, this examination confers no indefeasible right, and the novelty of the invention and the validity of the patent are still open to be questioned in a court of law. Considerable discussion arose in the grand committee as to the term for which a patent should be granted, whether it should continue at fourteen years, or whether the term should be increased to the seventeen years for which patents are granted in America. No alteration, however, has been made in this respect. A more important consideration for patentees was the amount charged by Government in the matter of fees. In America the charges for the whole term of a patent are 7%. In our country the Government fees have hitherto amounted to 175%, of which 25% had to be paid in the first three years, 50% at the end of the third year, and 100% at the end of the seventh year. The new Act reduces the total amount of the fees to 154%, and the payment for the first four years to 4%. The subsequent fees are the same in amount as before, but may be spread over a series of years, instead of being payable at the expiration of the fourth and seventh years, so that for a payment of 4% the patentee has four years within which to ascertain whether it is worth his while to go further, while by moderate annual payments afterwards this option is continued to him, with the power of stopping the payments at any year up to the thirteenth. The power of amending the specification, which, by the old law, was limited to disclaimer, is now extended to correction or explanation, so long as the patentee does not extend his invention beyond what it originally claimed. And the power to amend by disclaimer may, by leave of the court, be exercised at any stage during the pendency of an action for infringement or revocation. The Act also contains powers for the Board of Trade to direct the compulsory granting of licenses, where necessary, either in public or private interests. These provisions seem to remove an objection, which has often been made, that patents may be taken for the purpose of obstruction only. The powers which have hitherto been reserved to the Crown to make use of patented inventions, without necessarily making any compensation to the inventors, have long been deemed to be a great hardship. It has been felt that if patents stimulate invention, it is not wise that in the case of inventions required by the Crown, perhaps for the defence of the realm, and on which the safety of the kingdom may depend, the



meritorious inventor should be treated differently to the inventor of matters of less importance, and that if invention be required, the readiest way to secure it is to give proper remuneration to the inventor. It has also been found by experience that the Treasury, though professing to make some acknowledgment by way of grace for inventions adopted by the Crown, has hitherto dealt with the matter in too narrow a spirit, and it is hoped that a broader and fairer, because more liberal, view may be expected from the Board of Trade. It is, therefore, matter of satisfaction that the Act provides that a patent shall hereafter have the like effect against the Queen as against a subject, with a further provision that, in the event of an invention being required for the public service it may be used or taken by any department of the service of the Crown, on terms to be agreed with the patentee, or, failing agreement, to be settled by the Board of Trade. There are many other improvements introduced by the Act which I can only name without comment; such as the power to grant a patent to several persons (say, for instance, to a firm) where one only of the grantees is the actual inventor, and the provision that a patent may be taken by the legal representatives of a deceased inventor. The duration of an English patent is not now to be dependent on the continued existence of a prior foreign patent for the same invention; and where certain international arrangements may be made with other States, a foreign patentee is to have priority over all other applicants if he apply for a patent in this country. The Act is not confined to patents, but deals also in a comprehensive manner with the subject of trade-marks and designs, and repeals the several separate Acts which have hitherto contained the legislation relating to such matters. Numerous facilities are provided for the registration of designs, and the various terms for which copyright in registered designs have been granted are now altered into a uniform term of fourteen years. The Act is altogether a great improvement upon the existing law, while the convenience of having the hitherto widely-scattered enactments relating to patents, trade-marks, and designs collected within the provisions of a single Act of Parliament will be appreciated both by the public and ourselves. I feel that in dealing at such length with the new patent law I have, perhaps, been speaking of matters with which all my hearers may not be equally conversant, or in which they may not all feel an equal interest. But when I look to the returns of the Patent Office, and regard the steady rise during the last few years in the number of patents applied for (the number having increased from 3,405 in 1870 to 6,241 in 1882), I feel that business connected with patents must be on the increase also, and that any legislation which beneficially affects the inventor, either in procuring his patent or defending his rights, must necessarily be of interest to our profession.

### A FIRE-RESISTING CEILING.

A SUMMONS, which had been taken out by the Metropolitan Board of Works against Messrs. Gatti, the owners of the Adelphi, was again heard by Mr. Flowers at Bow Street on the 12th inst. The defendants were charged with unlawfully making default in certain alterations necessary to remedy some structural defects as required by a lawful and valid notice signed by the clerk of the said Board. The notice required—1. That a proscenium wall of brickwork should be built to divide the stage from the auditorium—the wall to be carried down to the level of the foundations of the building and carried up to a height of 3 feet above the roof of the auditorium, measured at right angles at all points to the slope of the roof, and that all openings in this wall, except the larger or proscenium opening in front of the stage, be closed with wrought-iron doors fitted without woodwork. 2. That the portion of the house, 18 Maiden Lane, used as a scene dock, be separated from the rest of the house by fire-resisting materials. 3. That the house, 19 Maiden Lane, be separated from the stage by a brick wall, and that all openings in such wall be closed by wrought-iron doors fitted without woodwork. 4. That the whole of the ceiling over the auditorium be made fire-resisting. 5. That the partitions and floors dividing the property shop, dressing-rooms, store-rooms, armoury, and painting-rooms from the stage, be constructed of fire-resisting materials. 6. That the ceiling over the entrance from the Strand be formed of fire-resisting materials. 7. That strong hand-rails be fitted on both sides of the staircase from the principal entrance of the dress-circle level and on the side of the staircase to the upper circle and the gallery staircase respectively, and that the hand-rail to the gallery staircase be strengthened. 8. That the doors to the gallery staircase next to Bull Inn Court be made to open outwards. Mr. Burton, who appeared for the Metropolitan Board of Works, admitted that the necessary alterations had been effected to the satisfaction of the Board, with the exception of requisition No. 4, which was that the whole of the ceiling over the auditorium should be made fire-resisting. The roof had been covered with thin sheet iron, which was not quite approved of by the Board; but it would be for the learned magistrate to decide whether the requisition in question had been properly complied with.—Mr. Fladgate, for the defendants, said that, in addition to carrying out the Board's

requisitions, a sum of 6,000*l.* had been expended. With regard to the ceiling, evidence would be given.—Mr. Spencer Chadwick, architect, said that he had been instructed to carry out the requirements of the Board. He had interviewed the architect appointed by the Board, who had intimated that it would be requisite for the roof of the auditorium to be of tiles or 5-lb. lead; but witness had pointed out the danger that might arise, in the event of fire, by the falling of molten lead on to the audience. He had therefore suggested the substitution of the galvanised sheet iron, which, in his opinion, would be more effectual for fire-resisting purposes than the means proposed by the Board.—Mr. Flowers: The only question is whether the iron is thick enough.—Witness: It is more fire-resisting than 5-lb. lead.—Mr. Flowers said that, as far as his judgment went, he thought that everything had been done by the defendants, and he considered that the roof was fire-resisting. It was therefore only a question of costs, and he ordered Messrs. Gatti to pay 3*l.* costs of the several adjournments that had taken place in connection with this matter.

### CHURCH BUILDING AND RESTORATION.

**Girvan.**—The memorial-stone of the new parish church, Girvan, has been laid. The church is seated to accommodate 940 persons. The architects are Messrs. J. M'Kissack & W. G. Rowan, Glasgow. The cost of the building is 4,500*l.* A hall and class-room is to be added at a cost of 650*l.*, so that the entire sum will amount to 5,150*l.*

**Govan.**—The memorial-stone of a new Wesleyan church, situated at the corner of Fleming and Brunel Streets, Govan, has been laid. It will accommodate about 500 persons. A hall adjoining, to be used for Sunday school purposes, is capable of holding 300. The church is estimated to cost about 5,000*l.* The architect is Mr. William F. M'Gibbon, I.A., Glasgow.

**Hanford.**—The memorial-stones of a Primitive Methodist chapel have been laid. The building will be plain, but substantially erected of red and blue bricks, with red-pressed tiles, and crest ridging for roof. Accommodation will be provided for 160 persons. Mr. E. Jones, of Hanley, is the architect, and Mr. J. Bennett, Newcastle-under-Lyme, the contractor.

**Irby-on-Humber.**—The church of St. Andrew's, Irby-on-Humber, has been reopened after thorough restoration. The church is of early Norman foundation, dating from soon after the Conquest. It was then a small building, as the nave arcade on the north side is of two arches only. It had probably only one aisle, as the arches on the south side are nearly a century later in date, the aisle wall being much later still, probably late thirteenth-century work. At present the church consists of a nave, with north and south aisles, chancel, western tower, and a modern small porch. Before the recent restoration the nave and aisles were all under one roof. Now the nave has been raised to its original pitch as shown by the old weather mark on the east face of the tower. The chancel was so dilapidated that it was necessary to rebuild it, and this has been done on the plan following the architecture of the interior of the church, rather than the exterior. It is a simple Norman building, with three windows at the east end and two on the south side. They are small and narrow, and similar in character to those south of the nave at Lacey, and are widely played within. Mr. Fowler, of Louth, is the architect under whose direction the work has been carried out.

**Ketton.**—The beautiful spire of the parish church has been considered unsafe for some time, so much so that it was thought advisable to take part of it down and rebuild it. Scaffolding for that purpose has been erected, and the work of demolition commenced. The work has been entrusted to Mr. Halliday, builder, of Stamford.

**Lewisham.**—A mission church in Brookdale Road, Springfield, Catford, S.E., in connection with St. Mary's parish church, was opened on September 29. The building comprises an open nave, 52 feet by 28 feet, with small chancel, with moulded arch and stone corbels; a class-room for tea and other meetings, 22 feet by 14 feet; vestry, 14 feet by 12 feet; closets, lavatory, and other conveniences. The church is of stock brick, with red brick arches and dressings externally, with plain lancet and circular windows throughout. The church will accommodate 300 persons in chairs, and the contract price, including special-made gas fittings, stoves, drains, fencing and gates, was under 950*l.* The work has been well carried out by Mr. S. J. Jerrard, under the superintendence of the architect, Mr. Horace T. Bonner, A.R.I.B.A., of High Street, Lewisham, S.E.

**Liverpool.**—The memorial-stone of St. Gabriel's Church, Beaufort Street, Toxteth Park, has been laid. The church is arranged to seat 615 worshippers, and will consist of nave, transept, chancel, vestry, and tower. The nave is spacious and lofty, 92 feet long, 39 feet 8 inches wide, and 33 feet in height from floor to ceiling, the roof being in one span. The transept is placed on the south side of the nave, and is 29 feet 10 inches wide and 12 feet 6 inches



deep, also 17 feet in height, opening into the nave with an arcade of two bays. The chancel is fully developed, being 25 feet long, 21 feet wide, and 27 feet high, opening into the nave with a lofty arch, 18 feet wide; and on the north side of the chancel provision has been made for adding an organ-chamber 14 feet by 11 feet. The floor of the chancel will be laid with tiles, on iron and concrete sub-floor, and will contain seats for the clergy and choir. The tower, which is placed at the north-west angle of the nave, and the base of which forms the principal entrance to the church, is 10 feet square inside, and 15 feet square outside. Its height from the pavement to the parapet measures 83 feet, and the total height to the top of the vane 117 feet. The contractor is Mr. S. Webster, Bootle; subcontractors, Mr. J. Dilworth, bricklayer, Wavertree; Mr. J. Leslie, mason, Bootle; Messrs. Callaghan & Son, plasterers; and Mr. T. Lea, plumber—both of Liverpool. The architects are Messrs. H. & A. P. Fry, of Liverpool.

**Moseley.**—The corner-stone of a new church has been laid. The building, a portion of which only will be now erected, is designed by Mr. W. Davis, architect, Colmore Row, Birmingham. It comprises chancel, clergy and choir vestries, organ chamber, north and south transepts, and part of the nave, accommodating nearly 400 persons. The second portion will comprise an extension of nave and aisles, and the erection of a north porch with tower and spire, providing additional accommodation for 326 persons. The tower and spire will be in the centre of the west end, having a total height of 137 feet. The builder is Mr. William Bloore, of Alma Street, Aston, and the masonry work will be done by Messrs. Miller, Carr & Co. The total cost of the completed building will be about 8,000*l.*, the cost of the portion now being erected being about 4,000*l.*

**Rosehearty.**—A church, which has been built by the United Presbyterian congregation of Rosehearty, has been opened. The style of the building is early Pointed Gothic. The walls are built of the dark blue stone of the district, squared; while the dressings and ornamental parts are of picked Pitsligo granite, the two colours of stones forming a pleasing contrast. The principal elevation is to the east or street frontage. The architects of the new church were Messrs. Ellis & Wilson, Aberdeen. The contractors for the work were: Mason work, Mr. Davidson, New Pitsligo; carpenter work, Mr. Scott, Rosehearty; slater work, Messrs. G. & R. Morrison, Fraserburgh; plaster work, Messrs. Kirk & Piggot, Aberdeen; plumber work, Messrs. A. Robertson & Son, Aberdeen; painter work, Mr. A. Chalmers, Banff.

**Sevenoaks.**—On Monday last, the 15th inst., the memorial-stones of the new Bible Christian chapel at Sevenoaks were laid. The style of the building is Gothic, of the Early English period; the materials are brick, with stone dressings, the principal front being of a rich red from Lord Stanhope's fields, and by the introduction of moulded and ornamental bricks, a cheap but effective elevation is produced. The architect is Mr. J. Kingwell Cole, of London; and the builder is Mr. John Boase, of Sevenoaks.

**Stranraer.**—The foundation-stone of a United Presbyterian church has been laid. The new church occupies a fine site adjoining the county buildings, and is expected to cost about 3,000*l.* The architect is Mr. Pettigrew, Glasgow.

**Whiston.**—The restored church at Whiston, near Rotherham, has been reopened. The work has been carried out from the designs of Mr. John Oldrid Scott, by Mr. J. J. Fast, of Melton Mowbray, Mr. J. Hannaford acting as clerk of works.

**Woodham Ferris.**—The parish church of Woodham Ferris having for a long time been in a dilapidated condition, an effort is being made to repair and refit it throughout. This church is mainly of the date of 1154. The tower fell in 1704, and again in 1774, and was then replaced by the present wooden turret. The work of restoring the church has been entrusted to Mr. C. Pertwee, architect, of Chelmsford, and is being carried out with special care that every feature and detail of interest shall be preserved.

**Woolston.**—A new chancel has just been added to Jesus Chapel, Pear Tree Green, Woolston. The chancel, which is of the Decorated period, extends 33 feet clear eastward of the old building, with a width of 22 feet. On the south of the chancel is an aisle 22 feet in length, with a width of 16 feet, and separated from the chancel by an arcade of two arches. The architect was Mr. J. Piers St. Aubyn, of the Temple, London; and Mr. W. H. Chapman, builder, of Woolston, carried out the work.

## NEW BUILDINGS.

**Ingestre Hall.**—This mansion, which belonged to the Earl of Shrewsbury, was destroyed by fire about a year ago. It is now being rebuilt, and the walls are up to the level of the first bedroom floors. The building is being made fireproof, as far as practicable, by the use of iron and concrete. At the present time about thirty masons and twelve bricklayers are employed on the work, and

this number will shortly be increased. The exterior of the building will be a facsimile of the original, while the interior will be partly remodelled, the designs providing for a hall of splendid proportions, approached through the fine old south porch, and a magnificent staircase. Lord Shrewsbury is taking the greatest interest in the work of reconstruction, and its progress is under the constant supervision either of himself or of Mr. Mynors, his agent. The architect is Mr. J. Birch, 8 John Street, Adelphi, London.

**Municipal Buildings, Paisley.**—Plans for new municipal buildings have been prepared by Messrs. Barclay, of Glasgow. The estimated cost is 30,000*l.* The ground-floor facing High Street will be arranged for shops.

## ARCHÆOLOGY.

**The Dane John, Canterbury.**—Some interesting archæological discoveries have just been made at Canterbury. In the course of the repair of the old city wall and buttresses still in existence beside the Dane John, a piece of Roman tessellated pavement was found imbedded in the structure. It is formed of small stone cubes, the tesserae, all white, being inlaid in a layer of fine salmon-coloured mortar, similar to the remains of a Roman villa recently found at Wingham and at the ancient church of St. Martin. Excavations within a short distance of the old city moat have resulted in from twenty to twenty-five skeletons being unearthed, together with Roman urns of fine red ware, a fragment of a highly-decorated bowl, bearing a raised image of a Roman soldier, with a shield on his left arm, coins, rings, bracelets, some curious flint implements, and rounded sling stones.

## GENERAL.

**A Fine Art Exhibition** was opened in Perth on Monday.

**The Munich International Exhibition** was closed on Monday. Many of the pictures exhibited are said to have been bought by English and American dealers.

**The Berlin Museum** has purchased for 180,000 frs. Rembrandt's painting of *Potiphar accusing Joseph before Pharaoh*. The work was formerly in possession of Sir Thomas Lawrence.

**Mr. William Morris** will deliver a lecture on "Art under Competitive Commerce," at the West Bromwich Institute.

**A Statue** of Tannahill, the poet, by Mr. D. W. Stevenson, A.R.S.A., has been cast, and will be unveiled in the Abbey churchyard, Paisley, to-day. On the pedestal will be a relief representing peasant girls singing one of the poet's songs.

**A Statue of Sir Thomas White**, who was a liberal benefactor to Coventry in the sixteenth century, was unveiled on the 11th inst. It is the work of Messrs. Wells, and the pedestal was designed by Mr. T. W. Whitley, architect.

**The New Facade** of the cathedral at Florence will be uncovered on the 1st of November next.

**Messrs. Ward & Hughes**, the glass painters to the Queen, have completed a large three-light window for Christ Church, Walmersley, Bury, which is a memorial of the late Mrs. Jardine. Lady Affleck has presented Dalham church, Suffolk, with a memorial window by the same artists.

**Two Western Piers of Peterborough Cathedral** have been condemned, in addition to those already demolished, and this will entail on the Dean and Chapter an additional expense of 6,000*l.* The sum required for the complete restoration is over 60,000*l.*, of which only 17,000*l.* has so far been collected.

**Mr. John Gray**, engineer, of Waverley Place, Aberdeen, has offered to present the town with a school of art. The community have already subscribed 12,000*l.* for an art gallery and museum, and the cost of the school of art, which would be erected in juxtaposition with the museum, is estimated at not less than 4,000*l.*

**The Novelty Theatre**, Great Queen Street, was put up to auction on Tuesday, at the Mart, Tokenhouse Yard, and withdrawn, the only offer received being one of 7,000*l.* The property is estimated by Mr. Tewson, the auctioneer, to be worth 25,000*l.*

**The Rebuilding of Szegedin**, which was nearly destroyed by an overflow of the River Theiss, is nearly complete. The new buildings number 3,000, and comprise a theatre, a law court, telegraph offices, a town hall, barracks, schools, various charitable institutions, and four churches of different confessions. New quays and an iron bridge over the river have also been constructed, and above all three large dams have been made to protect the town from future inundations. In all some 30,000,000 fls. have been laid out in the new town.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, OCTOBER 20, 1883.

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*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

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### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

**SCUNTHORPE.**—Nov. 1.—Plans are required for a Cemetery Chapel, Mortuary, Lodge, Entrance Gates, &c. Messrs. Freer, Hett & Hett, Solicitors, Scunthorpe, Lincolnshire.

### CONTRACTS OPEN.

**ASHTON-UNDER-LYNE.**—For Building House and Shop. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

**AUDENSHAW.**—For Enlargement of Branch Schools, Denton Road, Hooley Hill. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

**BARROW-IN-FURNESS.**—Oct. 24.—For Construction of Sewer, &c. Mr. C. F. Preston, Town Clerk, Barrow-in-Furness.

**BOHOLA, Co. MAYO.**—Oct. 26.—For Building Constabulary Barrack. Mr. Edward Hornsby, Secretary, Office of Public Works, Dublin.

**CARDIFF.**—Oct. 22.—For Construction of Wrought-iron Swing Bridge. The Engineer's Office, 16 Bute Crescent, Bute Docks, Cardiff.

**CONGLETON.**—Oct. 24.—For Heating School Buildings proposed to be erected. Mr. Percy J. Sheldon, C.E., Congleton.

**CROYDON.**—Oct. 26.—For Building Lodge at the Waterworks. Mr. T. Walker, C.E., Borough Engineer, 8 Catherine Street, Croydon.

**DARENTH.**—Oct. 23.—For Engineering Work in Fitting-up Recreation Hall with Steam Warming Apparatus, Gas, Fittings, &c., Asylum for Imbeciles. Messrs. A. & C. Harston, Architects, 15 Leadenhall Street, E.C.

**DARLINGTON.**—Oct. 20.—For Building Wesleyan Sunday Schools, Classrooms, &c. Mr. F. W. Brooks, Architect, 40 High Row, Darlington.

**DARTMOUTH.**—Oct. 31.—For Reseating New Church, St. Petrox. Mr. W. Smith, Solicitor, Dartmouth.

**DAWLISH.**—Nov. 3.—For Enlarging St. Mark's Chapel. Messrs. Hayward & Son, Architects, 50 High Street, Exeter.

**DONCASTER.**—Oct. 25.—For new Premises in Broxholme Lane. Messrs. Wilson & Masters, Architects, Doncaster.

**DUDLEY.**—For Construction of Engine and Car Sheds for Steam Tramways. Mr. E. Pritchard, C.E., 27 Great George Street, Westminster, and 37 Waterloo Street, Birmingham.

**EAST TWERTON.**—Oct. 20.—For Building Infant School, and for Alterations to Boys' and Girls' Schools. Messrs. Browne & Gill, Architects, 1 Fountain Buildings, Bath.

**EDENBRIDGE.**—Oct. 23.—For Construction of Sewerage Works, Marlipit Hill. Mr. W. S. Fox, Engineer, Marsh Green, Edenbridge.

**EGREMONT.**—Oct. 23.—For Alterations and Additions to Public Offices, Church Street. The Surveyor, Public Offices, Egremont.

**ELLAND.**—Oct. 23.—For Building a Fireproof Mill, South Lane. Messrs. Horsfall & Williams, Architects, Post Office Buildings, Halifax.

**GAMRIE.**—Oct. 27.—For Building Farm House. Mr. George A. Bruce, Architect, Hotel Buildings, Banff.

**GREAT YARMOUTH.**—Oct. 26.—For Laying Pipe Sewers (12,000 feet). Mr. J. W. Cockrill, Borough Surveyor, Municipal Buildings, Great Yarmouth.

**HALIFAX.**—Oct. 22.—For Building Boundary and Retaining Walls, Range Lane. Messrs. Booth & Sons, Architects, Halifax.

**HANLEY.**—Oct. 23.—For Wrought Iron Bridge across Canal. Mr. Joseph Lobley, C.E., Borough Surveyor, Pall Mall, Hanley.

**HEMSWORTH.**—Oct. 29.—For Building Hotel with Stable, Coachhouse, Shed, &c. Mr. William Richardson, Architect, 13 Park Square, Leeds.

**HEYWOOD.**—Oct. 30.—For Alterations and Additions to Municipal Buildings. Mr. James Diggle, C.E.

**HUDDERSFIELD.**—Oct. 20.—For Laying Sewer (900 yards). Mr. R. S. Dugdale, Borough Surveyor, Town Hall, Huddersfield.

**HUNSLET.**—Oct. 23.—For Building Dwelling-house and Alterations to House. Messrs. Richard Towse & Son, Dewsbury Road, Leeds.

**ILKLEY.**—Oct. 31.—For Building Hydropathic Establishment. Mr. William Bakewell, Architect, 38 Park Square, Leeds.

**INVERNESS.**—Oct. 20.—For Building Two Semi-detached Dwelling-houses, Barnhill. Mr. John Robertson, Architect, Inverness.

**INVERNESS.**—Oct. 22.—For Building Station Offices, &c., at Forgie, Enzie, Ruthven, and Buckie. Mr. Paterson, Engineer, Inverness.

**KERACHIA, INDIA.**—Oct. 29.—For Cast-iron Pipes, Valves, Hydrants, &c. Messrs. F. P. Baker & Co., 6 Bond Court, Walbrook.

**LEEDS.**—Oct. 20.—For Building Boundary Walls and other Works for Cattle Market. The Borough Engineer, Town Hall, Leeds.

**LIVERPOOL.**—Oct. 26.—For Boundary Walls, Palisading, Entrance Lodge, Turnstiles, &c., Zoological Gardens. Messrs. W. Sugden & Son, Architects, Leek.

**MILFORD.**—Oct. 23.—For Execution of Drainage Works. Plans, &c., at 12 Mallow Street, Limerick.

**NOTTINGHAM.**—For Building Residence near the Forest. Mr. Arthur W. Brewill, Architect, Exchange Walk, Nottingham.

**NOTTINGHAM.**—Oct. 22.—For Building Additional Court Room and other Works at the County Court. Drawings, &c., at the County Court, Nottingham.

**NOTTINGHAM.**—Oct. 25.—For Construction of Storm-Water Culvert (two miles). Mr. Arthur Brown, Borough Engineer, Municipal Offices, Nottingham.



**NORTH-EASTERN RAILWAY.**—Nov. 14.—For Construction of the Alnwick and Cornhill Branch Line in Two Contracts. Plans at the Engineer-in-Chief's Office, Central Station, Newcastle-on-Tyne.

**OTTERY ST. MARY.**—Oct. 24.—For Construction of Reservoirs, &c. Mr. J. M. Martin, C.E., Castle Chambers, Exeter.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**PRESTWICK.**—Oct. 29.—For Construction of a Reservoir and Filters, Cutting Tracks, and Laying and Jointing Cast-iron Pipes, and other Works. Messrs. J. & A. Leslie & Reid, C.E., 72A George Street, Edinburgh.

**SKIRCOAT.**—Oct. 20.—For Alterations to House. Messrs. Horsfall & Williams, Architects, Post-office Buildings, George Street, Halifax.

**SOUTHPORT.**—Oct. 23.—For Extending and Strengthening Station Roof. Mr. J. H. Stafford, Hunt's Bank, Manchester.

**SOUTHWICK.**—Oct. 20.—For Building Cemetery Chapel, Lodge, and Entrance Gates. Mr. H. T. Gradon, Architect, Durham.

**STORNOWAY.**—Nov. 2.—For Construction of Drill Battery, Magazine, Sea Wall, &c. The Director of Works Department, Admiralty, 71 Spring Gardens, S.W.

**SWANSEA.**—Oct. 30.—For Alterations and Additions to St. Helen's Board School. Mr. E. Sidney Hartland, Clerk to the School Board, 7 Rutland Street, Swansea.

**WELLS, NORFOLK.**—Nov. 9.—For Building Coast Guard Station. The Director of Works Department, Admiralty, 71 Spring Gardens, S.W.

**WEST BROMWICH.**—Oct. 22.—For Building an Infectious Diseases Hospital. Mr. Edward Pincner, Architect, 274 High Street, West Bromwich.

**WEST DERBY.**—Oct. 27.—For Erection of Gate Lodge, Outbuildings, &c., at new Cemetery. Mr. F. Bartram Payton, Architect, Laisteridge Road, Bradford.

**WYKE.**—Oct. 24.—For Building a Detached House at Westfield. Messrs. Milnes & France, Architects, 99 Swan Arcade, Bradford.

## TENDERS.

### ABERDEEN.

For Additions to Buchan Combination Poorhouse, New Maud, Aberdeenshire. Messrs. ELLIS & WILSON, Architects, 34 Bridge Street, Aberdeen.

Jack, Bulwark, carpenter	£124 0 0
McKnight, Maud, mason	87 9 0
Shand, Peterhead, plasterer	59 0 0
Rennie, Fraserburgh, plumber	59 0 0
Brown, Maud, slater	26 10 0
<b>Total</b>	<b>£355 19 0</b>

### BALROTHERY.

For Supplying and Erecting at the Workhouse a Self-contained Cart Weighbridge, to weigh not less than four tons, for the Guardians of Balrothery.

Birney, Dublin	£45 0 0
Daniel, Dublin	45 0 0
Donnelly, Dublin	42 0 0
GATCHELL & SON, Dublin (accepted)*	40 0 0

\* Machine, £30; erecting same, £10

### BEDFORD.

For Building Stables, Bedford. Mr. J. LUND, Borough Surveyor. Quantities by the Surveyor.

Laughton	£710 0 0
Harrison	650 0 0
Foster	639 0 0
Corby & Son	619 0 0
Smith	607 0 0
PORTER (accepted)	598 0 0

### BEESTON.

For Street Improvement Works. Mr. W. WALKER, Surveyor.

Budd, Beeston	£1,219 0 0
Hopkin, Nottingham	1,692 0 0
Foster & Barry, Basford	1,087 0 0
Tomlinson, Derby	995 0 0
Smart, Nottingham	939 0 0
Knight, Loughborough	883 0 0
HAWLEY, Ilkeston (accepted)	851 0 0

### CAMBRIDGE.

For Building Class-room and Cloak-room to the Whittlesford National School. Mr. E. BAYS, Architect, Cambridge.

Pate	£190 0 0
Pamphelon	183 0 0
Yarrow	175 0 0
Runham	173 14 0
Alderton	170 0 0
Ellis	166 15 3
Sellit	159 10 0

### DONCASTER.

For Lining Conisbrough Park Tunnel (990 yards) with Brickwork. Mr. B. S. BRUNDILL, C.E., Engineer, Doncaster.

Rothery & Warburton	£2,800 0 0
Woodwiss	2,725 8 6
Rothery & Warburton (if with cast-iron standards)	2,498 0 0
Athron Bros. & Gill	2,200 0 0
Freeman	2,075 0 0
Pugh	1,500 0 0
Thomas & Acock	1,487 0 0
Smith	1,485 0 0
Wortley	1,465 10 0
Edmondson	1,150 0 0
GREEN (accepted)	1,057 15 0

### GATESHEAD.

For Building School-room and Vestry to Zion Chapel, Sheriff Hill, Gateshead. Mr. THOMAS REAY, Architect, Union Chambers, Grainger Street West, Newcastle-on-Tyne. Quantities by the Architect.

Wakefield & Briggs	£383 10 0
T. & R. Lamb	370 0 0
Simpson	345 12 0
Millard	337 17 6
Robson & Watson	303 8 0
Anderson & Hindmarsh	300 3 11
KEYMOUR, for all works exclusive of painting and glazing (accepted)	273 14 8
MILLER, painting and glazing (accepted)	12 3 6

### HEBBURN.

For Works in Price Street, Hebburn. Mr. FRED. WEST, Surveyor.

Mums, Hebburn	£805 0 0
Maughan, Jarrow	783 1 0
W. & M. YOUNG, Gateshead (accepted)	763 15 3

### IPSWICH.

For the Erection of New Stores, Fore Hamle, St Clement's, Ipswich.

Wyatt	£68 0 0
Tooley	594 0 0
Pells & Sons	587 0 0
Thwaites	574 0 0
Coe	560 0 0
BORRETT (accepted)	530 0 0
Felgett	495 0 0

### LLANDILO GRABAU.

For Rebuilding Moriah Baptist Chapel, Llandilo Grabau, Radnorshire. Mr. GEORGE MORGAN, Architect, Carmarthen.

Powell, Hay	£570 0 0
Prichard, Dolan	498 10 0
Price, Felindre	490 0 0
OWEN, Llandrindod Wells (accepted)	445 0 0
Price, Builth	400 0 0

### LONDON.

For Alterations at the Elephant and Castle Theatre, New Kent Road, S.E., in accordance with the requirements of the Metropolitan Board of Works, for Mr. William Hosford. Mr. FRANK MATCHAM, Architect. Quantities by Mr. Frederick Thomson.

	If the Theatre is closed for a fortnight.	If the Theatre remains open.
Patrick & Son	£1,223 0 0	£1,313 0 0
Patman & Fotheringham	1,073 0 0	1,173 0 0
Wall Bros.	830 0 0	843 0 0
TOMS (accepted)	809 0 0	819 0 0

For the Erection of a New Factory at Diana Place, Euston Road, N.W., for Messrs. George Rowney & Co. Messrs. EBBERTS & COBB, Architects, Savoy House, 115 Strand, W.C., and at Colchester.

Baylis	£4,357 4 1
Dawnay	415 0 0
Eureka Concrete Co. (Limited)	257 1 0

For Alterations, &c., to Shop, No. 91 London Wall, E.C., for Mr. F. W. Warrington. Messrs. EBBERTS & COBB, Architects, Savoy House, 115 Strand, W.C., and at Colchester.

Holt	£350 0 0
Hunt	301 0 0
Richardson Bros.	300 0 0
Baylis	275 8 6
STEEL BROS. (accepted)	218 0 0

For Pulling Down and Erecting Two Warehouses on the Site of Nos. 4, 5, 6, and 7 Banner Street, St. Luke's.

Dove Bros.	£2,130 0 0
Kirk	2,061 0 0
Crabb	1,921 0 0
Pacock	1,875 0 0
Harris	1,860 0 0
Richardson	1,833 0 0
Stimpson & Co.	1,830 0 0
Mattock Bros.	1,827 0 0
Archer	1,820 0 0

For the Superstructure of Fitzalan Chambers in Arundel Street, Strand, for the Law Land Company, Limited. Mr. J. DUNN, A.R.I.B.A., Architect. Quantities supplied by Messrs. Nixon & Raven.

Patman & Fotheringham	£8,573 0 0
Boyce	8,240 0 0
Ashby & Horner	8,220 0 0
McLachlan	8,100 0 0
Bywaters	7,986 0 0
Colls & Son	7,979 0 0
Patrick & Son	7,970 0 0
Morter	7,793 0 0
Chappell	7,468 0 0

### LONDON—continued.

For Alterations and Additions to the Virginia Plant Public House, Great Dover Street, Old Kent Road, S.E., for Mr. Charles Deakin. Messrs. J. SMITH & SON, Architects, 1 Argyle Square, W.C.

ROYAL (accepted)	£414 0 0
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For Building Board School, Townsend Street. Mr. E. R. ROBSON, Architect.

Goodman	£16,255 0 0
F. & F. J. Wood	15,286 0 0
Larter & Son	15,260 0 0
Shurmer	14,707 0 0
Marsland	14,444 0 0
Jackson & Ford	14,437 0 0
W. & F. Croaker	14,324 0 0
Hart	14,150 0 0
Higgs	14,140 0 0
Tarrant & Son	14,000 0 0
Grover	13,998 0 0
Brass	13,752 0 0
Perry & Co.	13,716 0 0
Wall	13,672 0 0
Lathey Bros.	13,609 0 0
Tongue	13,565 0 0
Scrivener & Co.	13,504 0 0
Patman & Fotheringham	13,490 0 0
Shepherd	13,441 0 0
Boyce	13,335 0 0
Cox	13,330 0 0
Stimpson & Co.	13,250 0 0
Atherton & Latta	13,241 0 0
Jerrard	13,214 0 0
Reading	13,159 0 0
Kirk & Randall	12,890 0 0
Oldrey	12,500 0 0

For Upton House Industrial School, Hornorton, for the London School Board. Mr. E. R. ROBSON, Architect.

Larke & Son	£11,648 0 0
F. & F. J. Wood	11,517 0 0
Staines & Son	11,284 0 0
Steel Bros.	11,125 0 0
Larter & Son	11,099 0 0
Jerrard	10,975 0 0
Lawrance	10,958 0 0
Williams & Son	10,933 0 0
Downs	10,838 0 0
Boyce	10,690 0 0
Grover	10,683 0 0
Gentry	10,660 0 0
Niblett	10,545 0 0
Oliver	10,530 0 0
Brass	10,492 0 0
Patman & Fotheringham	10,452 0 0
Higgs	10,375 0 0
Kirk & Randall	10,343 0 0
Shurmer	10,341 0 0
Wall	10,302 0 0
Atherton & Latta	10,300 0 0
Stimpson & Co.	10,239 0 0
Perry & Co.	10,190 0 0
Fergeant	10,172 0 0
Cox	10,172 0 0

For Building Board School, Station Road, Old Kent Road. Mr. E. R. ROBSON, Architect.

Steel Bros.	£16,884 0 0
F. & F. J. Wood	15,925 0 0
Webber	15,870 0 0
Goodman	15,547 0 0
Larter & Son	14,940 0 0
Williams & Son	14,910 0 0
Jackson & Todd	14,462 0 0
Higgs	14,380 0 0
Scrivener & Co.	14,373 0 0
Grover	14,266 0 0
Perry & Co.	14,219 0 0
Lathey Bros.	14,217 0 0
Wall	14,012 0 0
Boyce	13,998 0 0
Cox	13,980 0 0
Tarrant & Son	13,969 0 0
Stimpson & Co.	13,914 0 0
Shepherd	13,880 0 0
Brass	13,875 0 0
Patman & Fotheringham	13,701 0 0
Jerrard	13,621 0 0
Atherton & Latta	13,600 0 0
Shurmer	13,464 0 0
Kirk & Randall	13,426 0 0

For Building Board School, Plassy Road, Plumstead. Mr. E. R. ROBSON, Architect.

Staines & Son	£7,494 0 0
Perry & Co.	7,325 0 0
Niblett	7,300 0 0
Patman & Fotheringham	7,290 0 0
Brass	7,243 0 0
Oliver	7,225 0 0
Hart	7,215 0 0
W. & F. Croaker	7,194 0 0
Downs	7,149 0 0
Grover	7,149 0 0
Lathey Bros.	7,137 0 0
Wall	7,045 0 0
Atherton & Latta	7,075 0 0
Higgs	7,075 0 0
Jerrard	6,943 0 0
Kirk & Randall	6,869 0 0

### MOUNTAIN ASH.

For Works in Commercial Street, Mountain Ash. Mr. S. O. HARPUR, Surveyor.

Taylor, Pottery	£161 0 0
John, Mountain Ash	147 0 0
Edmunds, Mountain Ash	141 0 0
Edwards, Mountain Ash	135 0 0
Morris, Mountain Ash	116 0 0
Davies, Troedyrhiw	106 0 0
TAYLOR, Mountain Ash (accepted)	94 0 0

### NEW FOREST.

For Erection of Hunting Box at Bank, near Lyndhurst, for Mr. John Maxwell. Mr. FRANK J. BREWER, Architect, Richmond, Surrey.

Preliminary Contract, exclusive of Stabling, &c.  
F. & W. PAYNE (accepted) £1,500 0



**OAKHAM.**

For Building House and Shop, Market Place, Oakham. Mr. J. B. CORBY, Architect, Stamford.

Hayes, Melton . . . . .	£810 0 0
Halliday, Greetham . . . . .	790 0 0
Royce, Oakham . . . . .	752 0 0
Hollis, Cottesmore . . . . .	721 0 0
Perkins, Easton . . . . .	717 0 0

**RICHMOND.**

For Erection of Club Rooms, Norse Rowing Club, Lower Road, Richmond, Surrey, for Messrs. E. Messum & Sons. Mr. FRANK J. BREWER, Architect, Richmond.

Carman . . . . .	£900 0 0
Sweet & Loder . . . . .	879 0 0
CARLESS & Co (accepted) . . . . .	829 0 0

For Shop and Warehouse for Messrs. Wright Bros., Richmond, Surrey. Mr. FRANK J. BREWER, Architect, Richmond. Quantities by Mr. W. H. Barber, 12 Buckingham Street, W.C.

CARLESS & Co. (exclusive of Engineer's work) (accepted) . . . . .	£4,000 0 0
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**SHEFFIELD.**

For New Roads and Drains at Upper Herley, for the Sheffield Mortgage and Estates Company, Limited. Mr. JOHN CLARK, Surveyor, Sheffield.

Speight, Liverpool . . . . .	£698 4 9
Taylor, Barlboro' . . . . .	661 14 0
O'Donoghue, Sheffield . . . . .	656 0 0
Fletcher, Sheffield . . . . .	612 0 0
Naden, Sheffield . . . . .	600 0 0
Williams & Son, Sheffield . . . . .	590 0 0
Ward & Price, Rotherham . . . . .	562 0 0
Cook, Sheffield . . . . .	550 0 0
Malloy, Sheffield . . . . .	548 0 0
Eyre, Sheffield . . . . .	527 18 0
Shaw, Sheffield . . . . .	520 0 0
Hill, Sheffield . . . . .	498 16 0
SPRING, Darnall (accepted) . . . . .	475 0 0
Hancock, Brampton . . . . .	466 10 3

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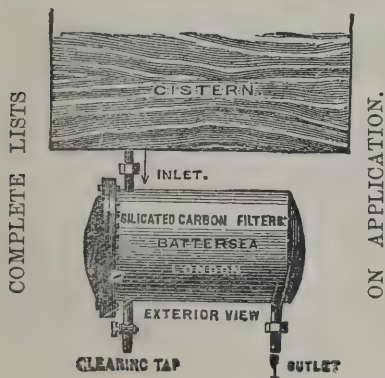
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For Works for the Stockport and Hyde Highway Board.  
Mr. T. CLARIDGE, District Surveyor.

Sykes, Woodhead . . . . .	£55 0 0
SIDEBOTTOM, Mottram (accepted) . . . . .	54 0 0
Green, Woodhead . . . . .	52 0 0
Bennett, Tintwistle . . . . .	50 0 0

**TWERTON-ON-AVON.**

For Construction of a Culvert in the Parishes of Lyncombe and Widscombe and Twerton-on-Avon, about 180 yards. Mr. BENJAMIN KITT, C.E., Secretary, Avon House, Twerton-on-Avon.

	Per yard.
Mann, Bath . . . . .	£2 16 0
W. Mitchell, Bath . . . . .	2 15 0
Rodd & Bennett, Weston . . . . .	1 19 6
Griffiths, Gloucester . . . . .	1 13 6
S. G. Mitchell, Bath . . . . .	1 13 6
Welch, Twerton . . . . .	1 12 0
Jennings, Bath . . . . .	1 10 0
Jarvis, Bath . . . . .	1 8 6
HAWKINS, Bathford (accepted) . . . . .	1 7 6

**WEYMOUTH.**

For the Erection of Offices and Board-room on the Quay, Weymouth, for Messrs. Cosens & Co. Limited. Mr. T. JACKSON, Architect, Weymouth. Quantities supplied.

Innes . . . . .	£373 0 0
J. A. Bartlett . . . . .	340 0 0
S. Bartlett . . . . .	310 0 0
Ayles . . . . .	308 10 0
Mace . . . . .	296 0 0
WHETTAM (accepted) . . . . .	278 0 0

**WIMBLEDON.**

For Construction of Girder Bridge, with Concrete Abutments, over the Wandale at Garratt Copper Works, Wimbledon.

COOKE & Co., Battersea (accepted).

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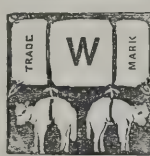
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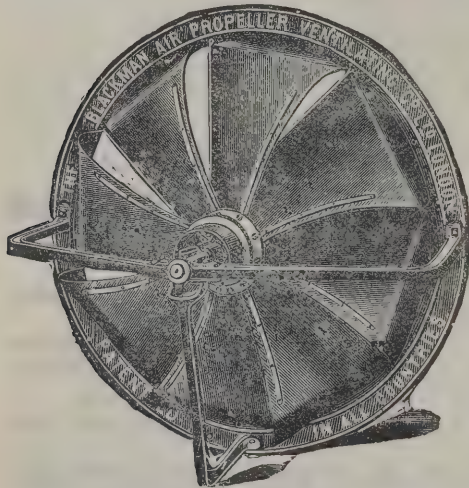


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# The Architect.

## ARCHITECTS AND "AGENCY."



ANY of our readers who know a little less of the world than others may scarcely believe it possible that the following communication could have been received—as it certainly was, and not long ago—by an architect in good practice, in the form of a loose slip inside a letter from, we believe, a London solicitor with whom he happened to be in correspondence on some incidental matter of little moment:—

"N.B. Doing a good share of Beer and Spirit Licensing, I take this opportunity to say that if at any time you feel disposed to refer anyone to me on such business I could bear in mind the terms of 'agency,' as I do with many solicitors and surveyors."

The recipient of this courageous notification informs us that it surprised him very much; and we have no doubt it did. But what is still more surprising is that the proposal it contained is not in any way intended as a temptation to evil; although how far it is suggestive of equivalent indignity we do not for the moment say. In a word, in these pushing times when "agency business" is becoming extended more and more every day, both in practice and in principle, architects need not be astonished to find themselves brought into contact and indeed into collision with it like other people, and compelled indeed to understand what it is, as an institution directly recognised by the law—and by the lawyers even further than by the law—in more departments of business than could well be specified. We may say, however, of the particular form of proposal above quoted that it is one which we take leave to think no class of what we call "surveyors" can really be accustomed to receive.

The practice of professional "agency" in general may be taken to have arisen, probably, out of the arrangements whereby a solicitor in the country employs a solicitor in London to conduct on the spot those proceedings which the rules of the Courts require to be done at headquarters. Solicitors are not a sentimental or squeamish profession; they work for pay without disguise or compromise; and accordingly they have certain established rules of their own by which—at least so the outer world understands—the costs in such cases are apportioned between the country practitioner and his agent, in such shares as fairly to recognise their relation to each other. Originally we may suppose there had been no idea entertained of the principle being carried further than the simple appropriation of each item in the bill of costs to the person who performed the item of service; but out of it there has eventually come a very different custom, which in some quarters allows a solicitor to take a share of the earnings, not only of another solicitor, but of an auctioneer, for instance, or a stockbroker, to whom he has (in the phraseology of the transaction) "introduced business." Now, inasmuch as solicitors know the law if anybody does, we may take it that there are a good many classes of adventurous "men of affairs" who are encouraged hereby to cultivate "agency" as an art—an artifice, if the reader prefers to call it so—and to call upon the Courts of Law to recognise such transactions as legitimate. And everyone who takes the trouble to read reports of litigation knows perfectly well that "the introduction of business" is so recognised, as a benefit which may be made the specific subject of a bargain for recompense. The practice has not got so far as to give a man a title to payment for the mere act of recommending another to profit, but certainly when recommender and recommendee have previously made a contract between themselves on that principle the Courts will so far enforce the contract.

Thus it happens that for a long time back it has not been unusual for manufacturers and dealers to give architects to understand that what is known as "the trade discount" would be payable to them, as to a builder, upon articles ordered by them directly instead of through a builder; indeed the offer has been expressly justified on two specific grounds. In the

first place, it has been said, there is the discount at somebody's service as a mere element of price; there is no builder to take it; the rules of trade refuse it to the employer; therefore let the actual intermediary have it; in the second place, if regarded in the light of remuneration for the trouble of the intermediary service (often considerable), let him have it who has had the trouble. So far it is enough for us to say that the Institute of Architects has from its foundation opposed the practice *in toto* as a point of honour, holding it to be manifestly inconvenient that the supervisor of building works should upon any pretence be allowed to involve himself in the supply of articles, the quality and price of which he is employed to check in the interest of the purchaser, his client. At the same time it is only fair to add that there are thoroughgoing men of business, as business goes, who still maintain the arguments above-mentioned to be sound, and who fail to see why an invariable trade discount should be lost, or why an architect should spend his time attending upon the selection of cheap articles of taste without remuneration. To this, however, the principle adopted by the Institute would still seem to have an answer to give, namely, that whenever any special remuneration is due, it ought to be paid directly by the employer, who, it may fairly be supposed, if he be one of those who prefer to take a tradesmanlike view of such matters, will be found ready to endorse his own opinions.

The division of labour, and of profit to correspond, of that kind which belongs, as we have said, to the agency business of lawyers, does not seem to be practised in architectural business; but there is another and not altogether dissimilar mode of co-operation which may be mentioned. We allude to those arrangements whereby, when two rivals find themselves equally supported amongst the patrons of some "job," they combine together and enable their supporters to coalesce. This is not a transaction which commends itself to the approval of abstract reasoners outside. It does a kind of credit to the good nature of the men engaged in it, and perhaps to their appreciation of the convenient English principle of compromise; but when, as sometimes has happened, one of the partners does all the work for love of the work, and the other takes half the money for the love of the money, this result is at least somewhat shabby.

It is not a long step from this kind of transaction to that wherein an outside practitioner, one of another profession altogether, although professing kinship for the occasion, "introduces" an architect to a client and claims "agency." Upon a proposal of this description, what we have to say may simply take the form of a moment's calculation. The architect is to earn 5 per cent.; and suppose his friend asks boldly for half; and indeed he may quote amongst other things in support of his demand the undeniable fact that architects of distinction have been known to work eagerly at half price for so-called "charities." Now it is a very fair rule that the outgoings of the architect in an ordinary work may be estimated at about 2½ per cent. Consequently, if half the commission of 5 per cent. is to go to the introducer, the worker will get nothing; and if the "agency" is to become less than half, it is plain that the balance of actual profit may still be difficult to discover. We need only add that the discredit of sharing with an outsider still remains to be considered; although, after all, the coalition partnerships we have alluded to are sometimes little if any better; and the practice of taking half price from "charities" is almost worse. Another specious form of self-denial seems to be unquestionably worse—namely, that of acting as "honorary architect," a thing which is never done, except in the way of baiting a hook for business, which robs it of all its merit if it has ever had any.

A slight flutter was occasioned in certain walks of architectural practice a year or two ago by a manifesto being issued by the Council of the Institute declaring their intention of expelling such members as might be found to share commission with quantity surveyors. If there is any kind of agency business in architecture which the law would on principle justify more than others, it is probably this. By the rules of the Institute itself an architect is authorised to be his own quantity surveyor if so employed by his client. In country practice it is said to be frequently impossible to work otherwise. Supposing, again, the existence of honesty—and why should this not be?—there are many who maintain that no better plan can be devised for enabling a young architect to perfect his practical knowledge than to encourage him to take out his own quantities, and, if he so pleases, to do the same with or for



a friend. But, as we take it, it is not this that the Council of the Institute have assumed the power of condemning; it is that kind of mere commercial "agency" in which an architect who is himself not a surveyor claims the right of bestowing employment upon a surveyor who is not an architect in consideration of a share of the payment. This is no doubt done by some persons, and without much concealment; but we cannot regard it otherwise than as a discredit to the profession, although perhaps perfectly lawful; and we rest this opinion upon the simple argument that no work is done for the money.

As a general rule, it may perhaps be admitted that the practice of "agency" is one which we must expect to see developing itself more and more as the times change and the ways of business change with the times; but there are certain principles which ought never to be lost sight of in a profession like that of architecture, such as these—that whatever is done must be done openly and above-board, and that no payment can honourably be received except for work done by the recipient. The necessity for acting, under any circumstances, in any sort of underhand way we wholly deny.

### PALAIS DE JUSTICE, BRUSSELS.

"THERE is but one monument in Europe," observed the architect of the Paris Opéra, M. GARNIER, speaking of the Palais de Justice, Brussels, on visiting that edifice under construction. And when the King of the Belgians remarked lately to the Procureur-Général that the country would soon possess a temple erected to Justice, that functionary replied by the following question: "Sire, are you quite sure that it is not rather a temple erected to Architecture?" Again, after the inauguration ceremony, the King, in replying to the address of the workmen who had been employed on the building, said: "The Minister of Justice remarked to me just now that the grand palace which you have constructed is a permanent exhibition of what our industries are capable of producing, an exhibition which does them infinite credit, and which I hope will be of great use to them." Certain it is that so magnificent a shrine has never before been dedicated to THEMIS, whether in ancient or modern times, and that the building, whose fit epithets are grand and colossal, is worthy to rank with the Acropolis of Athens and the Capitol of Rome. Erected on the highest ground of the city, it forms a prominent object from all directions. Its pyramidal form is indicative alike of that firmness which is the special attribute of Justice, and of the invocation, by pointing upwards, of a higher power to be present at the deliberations, while the immense portico would seem to bid all enter without exception. Indeed, DIDEROT's dictum that the use of a building should be manifested by its appearance from a distance is amply satisfied by the classical edifice which was inaugurated on Monday, October 15.

The architect of this creation was JOSEPH POELAERT, who was born at Brussels on March 21, 1817. Having studied at Paris under VISCONTI, the architect of the Louvre, he was, in 1856, named architect to the City of Brussels, and was subsequently instructed to prepare the plans of the church of Sainte-Catharine, and those for the rebuilding of the Monnaie Theatre or Opera-house, after it was burnt down in 1855. He also designed the column erected to commemorate the National Congress of 1831, and the church at Laeken containing the royal mausoleum. So far back as 1847 it was decided, on the report of the architects CLUYSENAAR, PARTOES, SPAAK, and SUYS, that the Jesuits' Convent in the Rue de Ruysbroeck, which has served for the Law Courts up to the present time, was too old, and that a new Palais de Justice must be erected. In 1861 a public competition, in which foreign architects were placed on the same level as Belgian, produced, indeed, several fine designs, but none which fulfilled the requirements of the case. Accordingly, the Government, on the proposal of the Minister of Justice, entrusted POELAERT with the design of the new edifice; and it is said that he immediately produced it, having worked at it secretly for ten years. His plans were elaborated and approved the following year, when he was commissioned to carry them out. Towards the closing years of his life, however, he became so excitable that he could only work at his drawings in the dead of the night, when absolute silence prevailed, the slightest noise unnerving him. He, at last, went out of his mind, and after lingering for upwards of twelve months, died on November 3, 1879, at the age of sixty-three years, leaving some

of the details unfinished. He was officer of the Order of Leopold, and Chevalier of the Legion of Honour, while the international jury of the Paris Exhibition of 1878 awarded him a gold medal for his design of the palace.

The works were begun in 1866, and the foundations, consisting of masonry pillars and arches, were finished in 1868. The site chosen is the summit of a hill near the Boulevard Waterloo, sloping down to the valley of the Senne. On account of having to provide for all the courts, civil, criminal, and military, that hold their sittings in the capital, as well as for the tribunal of commerce, with their several dependencies, the area of the building is necessarily considerable, and has been increased successively from 16,000 to 20,000, and ultimately to 26,700 square mètres, or 287,407 square feet; that is to say, nearly double the area of the New Law Courts, London. From this figure must be deducted 5,100 square mètres for internal courtyards, leaving 21,600 mètres, or 232,508 square feet for ground actually built upon. The Salle des Pas Perdus, occupying the middle of the building, with its galleries, the staircases, vestibules, and other vomitories, cover an area of 14,800 square mètres (159,311 square feet), which is therefore rather over two-thirds of the whole area built upon. There are no less than 272 separate chambers, of which twenty-seven are large courts of justice. The difference of level caused by the slope of the site has necessitated the formation of an immense *terre-plein*, or platform, ascended by inclined planes of easy gradient, 300 mètres (984 feet) long, and 17 mètres (nearly 56 feet) high, which greatly enhance the effect of the building when viewed from the lower side. The total area of the site, including this platform, the terraces and steps, is 52,464 square mètres, or 564,738 square feet. The style adopted is the Grecian, mingled in parts with Roman, and to a slighter extent with Hindoo and Egyptian; but the whole is treated with such marked individuality that the structure is likely to remain perfectly unique, as it is probably the largest of the kind in existence.

The principal façade, facing the north, is on the same centre line as the Rue de la Régence, which it terminates at the end farthest from the Place Royale. Its chief feature is an immense portico of striking appearance, 39 mètres high and 18 mètres wide (128 feet by 59 feet), executed entirely in white Comblanchien stone, and thus contrasting with the slate-blue Soignies stone of the rest of the façade. The Classical style adopted did not permit of turning an arch over this wide opening, which is, therefore, spanned by girders covered with plaster, so as to present the appearance of a monolith; but this expedient has been severely criticised, on account of the method of construction being concealed from view. Two enormous *antæ*, supplemented on the inside by Corinthian columns, form a support to griffins carrying a severe entablature crowned by a pediment. Over the *antæ* are *acroteria*, and an attic storey surmounted by a bust of MINERVA, 3½ mètres (or 12 feet) high. To the right and left of the portico, a peristyle or double colonnade, composed of shafts in Soignies stone, 1'8 mètre (or 6 feet) in diameter, and of a fine Doric profile, extending the whole length of the façade, leads to pavilions at the angles of the building. The side frontages form continuations of these two pavilions; and in the middle there are two *avant-corps*, or fore-parts, leaving the central motive recessed. The lateral portions of these frontages are very fine, being ornamented with a Doric colonnade. The rear façade, of noble simplicity, is by many considered the finest portion of the whole structure. An immense *avant-corps* projects considerably beyond the sides, being terminated by two large pilasters of magnificent sweep, and ornamented by a pediment surmounting a loggia. The cornice running round the building is 5 mètres (or 16 feet) high, and projects 1¼ mètres (or 6 feet), being surmounted by an attic storey of 3¼ mètres (or 12 feet). The base is 8 mètres (or 26 feet) high, and projects 1½ mètre (or 5 feet). Constructed of Soignies stone, it is boldly treated and produces a grand effect.

The plan of the building presents the form of a parallelogram, nearly approaching a square, but with the addition of the two wings above mentioned, projecting 25 mètres (or 82 feet) from the principal façade. There are four main entrances, one in the centre of each of the sides. On account of the difference of level there are two ground floors—the *rez-de-chaussée supérieur* and the *rez-de-chaussée inférieur*—below which is the basement, containing the cells for prisoners and various offices, and still lower the cellars. The Salle des Pas Perdus, 74 mètres (or



243 feet) long by 40 mètres (or 131 feet) wide in the clear, is situated in the middle of the upper ground-floor, and it is surrounded by galleries 6 mètres (or nearly 20 feet) wide, on the level of the *étage supérieur*, or upper storey. The area of this hall, with its galleries, is therefore 4,400 square mètres, or 47,363 square feet.

From the middle of the Salle des Pas Perdus rise the four immense piers which support the cupola, surmounting the square dome, the total height being  $97\frac{1}{2}$  mètres (320 feet) above the floor, and  $102\frac{1}{2}$  mètres (336 feet) above the bottom of the steps leading to the main entrance. In this cupola alone has the architect permitted himself to depart from the straight lines of the severe Classical style he has adopted throughout the building. The dome generally is, perhaps, the most original portion of the structure, and has given rise to the greatest amount of controversy, both as to its design and practicability and the means adopted for carrying it out. The dome, viewed from the outside, consists of a stylobate, a series of steps carrying the base, the cupola, and two rows of pillars and superposed columns. Four piers, 48 mètres high and  $2\frac{1}{2}$  mètres square ( $157\frac{1}{2}$  feet by 8 feet), at the corners of the dome support the cupola. Between these four piers are rows of Ionic columns, separated by pillars nearly  $1\frac{1}{2}$  mètre (5 feet) wide. Columns of the same order, and more than a mètre in diameter at the base, project from the outer faces of the corner pillars, thus giving the dome a width of 27 mètres (88 feet). The columns in the second row are 10 mètres (33 feet) high, including the entablature and the attic which surmount them. Four seated bronze statues, representing *Power, Justice, The Law, and Royal Clemency*, executed by M. VINÇOTTE, M. DUTRIEUX, M. DESENFANTS, and M. DE TOMBAYS, occupy the angles of the dome. At the height of the bases of the columns which project from the outside faces of the corner pillars there is an external gallery communicating with a second inside the base, while a third gallery is formed at the same height inside the dome. These three galleries are placed in communication with the stairs, which lead from the ground-floor to the top of the cupola.

Contrary to the usual practice of allowing the entire dome to rest only on four supports, which must consequently be very large, POELAERT has arranged the cupola, its stylobate, and its base in distinct vertical planes, and has therefore increased the number of the points of support, while giving them all dimensions proportioned to the load they have to carry, and also in harmony with the general design. Instead of the usual arches, a system of girders has been adopted, in which vertical pressure is substituted for horizontal thrust. There are twenty-four points of support, divided into four distinct groups, and all placed symmetrically round the large central piers which carry the cupola. As the height of these piers is nearly 48 mètres (157 feet), it was necessary, in order to keep them perfectly vertical, to tie them together by girders placed at three different heights, and arranged so as to form large soffits for carrying the wall. The construction of the dome has required 172 girders, weighing together about 4,000 tons. The supports for the dome, constructed of brick, are loaded with less than a tenth part of the crushing strain; while the four central piers, which carry the cupola, are loaded to nearly one-eighth of that strain. These are, however, constructed of large and carefully-selected blocks of Soignies stone, with the beds and joints carefully dressed; and every effort has been made to reduce the load upon them in carrying out the details of the superstructure.

The staircases have been pronounced the grandest part of POELAERT's magnificent conception. The Salle des Pas Perdus, which, it must be borne in mind, is on the upper ground-floor, and is reached directly, from the portico in the principal façade, through a large door, is also reached from the east frontage, that in the Rue aux Laines, by a staircase remarkable for its boldness and for its variety of perspective. It is also reached from the opposite side, that of the Rue des Minimes, which is on the lower level, by a straight flight of a hundred and seventy-one steps, 80 mètres, or 262 feet long, and rising  $20\frac{1}{2}$  mètres, or about 67 feet. The galleries, 6 mètres or nearly 20 feet wide, surrounding the Salle des Pas Perdus, are reached from the upper ground floor by four magnificent staircases. They are also approached from the peristyle at the principal entrance by two colossal staircases rising on the right and left of the immense portico. At the base of these staircases are placed white marble statues, larger than life, of *Demosthenes* and *Lycurgus*, by

M. CATTIER, and of *Cicero* and *Ulpian* (DOMITIUS ULPIANUS, the Roman juriconsult, who died A.D. 228) by the late M. BOURÉ.

In the upper storey, reached from the peristyle by a pair of colossal staircases, the gallery overlooking the Salle des Pas Perdus communicates with the ordinary civil court of appeal on the right, the tribunal of commerce directly in front, and the ordinary chamber of the high court of cassation on the left; while the chambers for the special sittings of the courts of appeal and cassation are placed on the same level in the corner pavilions. On the centre line of the upper ground-floor, and opposite the main entrance—that is to say, just underneath the tribunal of commerce—is the assize court; while to the right, when facing it, is the criminal court of appeal, and to the left the civil tribunal of first instance. In the lower ground floor (*rez-de-chaussée inférieur*), the military court lies immediately below the assize court; while the council of war, the chamber of the justice of the peace, and the civil tribunal also find a place on this floor.

The three courts of assize, appeal, and cassation, measuring 28 mètres long by 12 mètres wide (92 feet by 39 feet), are the largest and finest, and differ from one another only in the decoration. The assize court is surrounded by a wainscot of black marble, with panels of white-veined green marble, except the reserved portion, where it is of oak. The wainscot is pierced by six low doors of carved oak, while the wall above is of a slatey-grey tone. Square columns of grey marble carry a gallery on either side; and the floor is laid with oak in the reserved portion, and with grey and blue stone elsewhere. The decoration of the court of appeal is richer than that of the assize court, the oak doors being surrounded by *portiques* of black, green, and red marble. Over the principal entrance there is the frame for a future painting of *Leopold II. proceeding to the Inauguration of the Palais de Justice*. The most sumptuous of the three courts, however, is the high court of cassation, having a single row of red marble columns with gilded capitals, brass bases, and black marble pedestals; while the doors are of carved ebony, enriched with gilt *appliques*. The ceiling is richly decorated; and the walls above the marble wainscot are green and gold. Over the principal entrance, which is surrounded by a *portique* of rare marbles, there is a frame destined to receive a picture representing *Leopold I. decreeing the construction of the Palace*. Above the dais for the court, which is opposite the main entrance, there is a loggia, the front of which rests on two lofty columns.

The total quantity of masonry is 570,000 cubic mètres or 20,130,500 cubic feet, and the façades have a superficial area of nearly 50,000 square mètres or 538,215 square feet. There are about 1,500 windows, measuring together 10,243 square mètres (110,258 square feet), and 1,400 doors measuring 10,970 square mètres (118,084 square feet). The site was purchased from the Comte DE MÉRODE, for 3,000,000 frs. (120,000*l.*); and the original estimate of the building was 8,600,000 frs. (344,000*l.*). The cost at present incurred is, however, 45,000,000 frs. (1,800,000*l.*), the foundations alone having amounted to 1,600,000 frs. (64,000*l.*), while the various fittings and adornments yet to come will probably bring up the total to 50,000,000 frs., or 2,000,000*l.* sterling. Four-sixths of the cost will be defrayed by the Belgian Government, one-sixth by the Province of Brabant, and the remaining sixth by the City of Brussels. The work has been carried out under the direction of M. WELLENS, Ingénieur-en-Chef des Ponts et Chaussées, assisted by MM. CARPENTIER, ENGELS, and BÉNOIT, architects, and M. MARCQ, engineer; while it has been executed by M. DE VESTEL as principal contractor. We are indebted to the executive of the palace works for the plans and for facilities of obtaining information, and also to M. P. SAINTENOY, architect, of Brussels, for great assistance in compiling our notice.

## PROJECTED STREET COMMUNICATIONS IN LONDON.

NO doubt the announcement just made,\* unofficially at present, that the Metropolitan Board of Works intend to postpone all their schemes of improvement "for the facilitation of traffic in London," in consequence, it is said, of the grave doubt which exists as to the possibility of procuring an extension of the term for the coal and wine dues, will cause considerable disappointment to those who looked forward to

\* See the *Times*, October 24.



the coming session as one likely to afford relief to the long-suffering public of London in various directions from the congestion of traffic, and the want of direct communication from one quarter of the metropolis to another in its most crowded and most important parts.

A new project, however—a new Thames tunnel—is to be the exception. But while we gladly think something may at last be done to try and remedy the evils of the natural severance of one great district from another by the river, we cannot think that the easier and in some respects more important matters connected with the centre of London should be neglected, and be summarily set aside, because of the lecture which the Treasury read to the Board on the importance of economy in public works. Why, for instance, now that the Law Courts are in full working order, and more and more resorted to day by day, should the small but very important and long-awaited-for improvement of the approaches be postponed, and the streets so much wanted from south to north to afford direct access from the Strand across Holborn to the Northern Railway Stations be abandoned, when it is evident that a little attention to details, and a little cutting down of the magnificence of the scheme proposed by the Board, would bring it within reasonable bounds, and within measurable distance of possibility?

Without disturbing at vast cost the whole of the block of buildings between the Strand and Wych Street, a full and sufficient improvement could be made, and by reducing the churchyard of St. Clement Danes (as proposed, we are informed, by the Metropolitan Board) ample width for present traffic would be obtained.

A new street carried over vacant ground, or over such vile property as it would be a charity to remove—at the side of Clement's Inn—brought to join the prolongation of New-castle Street at a point south-west of Lincoln's Inn Fields, might readily be laid out. The frontage of a circus formed at this point is already partly made by recent additions to the backs of houses which form a portion of the south side of the Fields, and the proper completion of it would give a fine vista into and through the Fields northwards. Without necessarily entering it or disturbing the valuable quiet and unique beauty of this square (the largest in the metropolis) by through traffic, a street can be carried from this circus at the back of the west side of the Fields, passing through stables, gardens, and other comparatively unimportant property to enter Holborn through Little Queen Street in a *direct* line, and thence straight onward to the north, in an unbroken line. Of course Little Queen Street would have to be widened, but it was to have been widened some time ago, and would have been had not the local authorities refused the handsome contribution of the Metropolitan Board at a time when it might most easily have been carried out. But Little Queen Street wants widening now, independent of any new project whatever. Every day shows the inconvenience of such a narrow thoroughfare, which after all leads nowhere *directly* south, though always full of traffic, endeavouring to find its way southward.

The plan we have been describing is that of Mr. CHAS. FORSTER HAYWARD, F.S.A., architect, which has been before the public now some considerable time, and has been supported by deputations to the Board, and as to which even now a memorial is being extensively signed. It seems to us the proper solution of the problem, and a solution we want in good earnest, if only to clear away the abominable and filthy courts and alleys on the route.

It is rumoured that the Board of Works preferred a plan coming through Lincoln's Inn Fields, cutting off some forecourts of houses and taking down others merely to get into Holborn, and stop there. But against this all the lawyers are in array, and all the more reasonable inhabitants of the district, for it is evident to anyone who has the proper map before him, that to carry a street as Mr. HAYWARD proposes through very unimportant property, opening frontages right and left, communicating with adjoining streets, and so affording good chances of recoupment of cost, would be more economical than to destroy frontages in Holborn, and houses in Lincoln's Inn Fields merely to gain access to Holborn itself, and go no further.

If Mr. HAYWARD's plan were a costly one, it would be worth carrying out from its intrinsic merits, and the advantages it offers for north and south direct traffic in a part of London where there is none, although most urgently needed. But we are assured that it is as economical as it is valuable, and

deserves to be well considered before it is set aside for anything less advantageous or more costly.

We are informed, too, that the oft projected railway from King's Cross to Charing Cross would pass at the point of junction of Little Queen Street and Holborn, and to accommodate this especially (and for other considerations), an octagon form of "Place" is proposed, so as to widen out the approaches either way, the station being on one face of the octagon; and that this can now be done without much additional cost, throwing the east side of the new and magnificent Holborn Restaurant into view. Also a diagonal street, if desired, from the Great Queen Street junction to Holborn by Little Turnstile—if required to relieve traffic cityward, if it should be found to set in that direction, which we rather question—is laid down in Mr. HAYWARD's plans.

The following would be some of the buildings and localities immediately interested in the through communication or in the quiet and salubrity to be obtained by the project: Northwards, Euston, St. Pancras, and King's Cross termini, with the stations of the underground line; the British Museum, and the West Central Post Office, Bloomsbury. In Lincoln's Inn Fields, the Soane Museum, the Inns of Court Hotel, and the College of Surgeons, King's College Hospital, the Law Courts—both the Carey Street and the Strand fronts—and the west side when extended; the Temple, and that part of the Strand and Embankment eastward, with Somerset House, Waterloo Bridge, and the Strand westward, and indeed the whole of that quarter of the metropolis.

We cannot, therefore, look upon this as a local improvement merely, but one of great importance to all; and we heartily commend it to the consideration of the Board should they be able to make an exception in their sweeping determination to give up "the projected metropolitan improvements."

## PARIS NOTES.

THE success of the day (the *actualité* as the French would call it) in the Paris municipal world is wood-paving. Notwithstanding the extent to which it had been adopted in England, this method of road-making was until very recently held in extremely low esteem on this side of the channel. Last year, however, the Wood-Paving Company, Limited, of London, obtained permission to lay down their blocks in the lower part of the Champs Elysées, from the Place de la Concorde to the Rond Point. The success of this experiment was so great that the authorities have since then adopted it at their own expense in the Boulevard Poissonnière and the Rue Montmartre—two of the very busiest thoroughfares in Paris. The crowning triumph of the system appears, however, to have been brought about by the visit lately paid to London and other English cities by some delegates of the Municipal Council. The report of these gentlemen as to the advantages of the system was so conclusive that the Council has decided to have it laid down in (1) the Faubourg Saint-Honoré between the Rue de l'Elysée and the Place Beauveau; (2) on the interior boulevards from the Madeleine as far as the Boulevard Poissonnière; (3) in the Avenue and Place de l'Opéra; (4) in the Rue Royale and south side of the Place de la Madeleine; (5) in the Rue de Rivoli from the Louvre to the Place de la Concorde; and (6) in the Rue des Saints-Pères from the Rue Jacob to the Boulevard Saint-Germain. It will be seen that these are all points where the traffic is extremely heavy. In the report above referred to, which was prepared by M. Vauthier, one of the delegates, it is remarked that this kind of paving has only entered upon its practical phase since the layer of wood blocks has come to be regarded as a simple coating to the road beneath, and not as intended to bear by itself the weight of the traffic. In the Rue de Rivoli, where the new roadway is now finished and opened for traffic, the method adopted has been that of making a regular bed of very hard concrete upon which the blocks are laid, and form a sort of slightly elastic medium between the vehicles and the stone surface beneath, which would by itself be very speedily worn out. The same method will be followed in the other thoroughfares mentioned above, and when completed Paris will possess 90,000 square mètres of this paving against about 600,000 in London. The work is being done by a French Société Anonyme. The inhabitants and frequenters of the Champs Elysées and its



neighbourhood, on returning this autumn to their favourite haunts, must have been agreeably surprised to find that the Quartier Marbœuf—the one blot amid the surrounding magnificence of spacious thoroughfares and sumptuous mansions—is being improved away. This district, bounded by the Avenue Montaigne, the Avenue des Champs Élysées, the Rue de Chaillot, and the Avenue de l'Alma, with its narrow, winding streets, tumble-down cottages, and miserable huts, could only be compared for wretchedness and squalor to the very worst slums of the capital, such as the Quartier Mouffetard or the heights of Belleville. To effect the desired transformation, it has first of all been necessary to raise the level of the streets, which were nearly 20 feet below the surface of the surrounding avenues, and this gigantic work of levelling-up has necessitated the bringing to the spot of no less than 15,000 waggon loads of rubbish, &c. At the same time, new thoroughfares are being made, improvements carried out in the gas and water supplies, at a cost of several million francs, and the land, the whole of which has been expropriated by the city, let for building purposes; everything, in fact, is being done to assimilate this bit of desert, which a few months ago was almost unknown by the mass of Parisians, to the luxurious district near the centre of which it lies.

Large temporary sheds have lately been erected in the south court of the Louvre for the reception of the statuary at present exhibited in the Vénus de Milo Gallery, which has to be cleared in connection with the construction of the cellars that are to be made under all the ground-floor rooms; as has been already done under the Caryatides Gallery. It is expected that some important archaeological discoveries in connection with the old Louvre may result from these excavations. The object of the administration in thus cellaring under the Louvre is to make the ground-floor rooms and galleries drier, great damage to many works of art of priceless value having already been occasioned by the damp.

The attendance at the Triennial Exhibition in the Palais de l'Industrie amounted to upwards of 20,000 on Sunday last—a free day. The Government must, however, be convinced by this time that the season was badly chosen for the inauguration of this new Salon. On some days there are not more than 1,500 visitors; rooms may be seen at times entirely empty, and the sculpture garden below is generally deserted.

In the course of the excavations undertaken in connection with the construction of the Suresnes weir and locks, traces have been found of a lacustrine station, which, judging from the large number of bones and utensils collected in a few hours, must have been an extensive settlement of the race that was driven out by the Gauls.

The four allegorical statues of *Justice*, *Wisdom*, *Force*, and *Prudence*, which were taken down a year ago from the Grand Entrance of the Palais de Justice, have now been replaced by *fac similes* executed by M. Hayon. The originals, by Berruyer and Lacombe, were erected in 1782, and remained in position exactly a century. During that time they had become so damaged by the influence of the weather that they were visibly crumbling away, and threatened to fall into utter ruin. Last year plaster casts were taken of them, and from these the copies above referred to have been produced. The acroterion of the Grand Entrance where they stand has also lately been restored, and the whole may now be considered in a satisfactory condition.

#### MR. G. SIMONDS ON MODERN ART.

THE prizes in the Reading Art School were lately handed to the students by Mr. George Simonds, the sculptor of the *Dionysos* and the *Theseus*, lately exhibited at the Royal Academy, and who is a native of the town. Mr. Simonds said it was seldom that sculptors were called upon to perform those pleasant offices, and he must attribute their kindness to a desire to express to their fellow-townsmen sympathy with his endeavours, however feeble they might have been, towards the promotion of a pure and noble school of sculpture in this country. He had visited the exhibition of the works of art students in those buildings, and could not refrain from saying how excellent and painstaking must be the teaching that had produced such satisfactory results. Everyone who was at all in earnest in his professional work was pleased to advise and assist his younger brethren, and especially was that the case in the Middle Ages, during the great revival of the arts. In those days art seemed to have been a natural spontaneous growth, and an academy of arts, with an annual exhibition, "admission one shilling," would have surprised and perhaps shocked those simple folk who loved art because they recognised it as being something noble, true, and beautiful—to whom it was so far from

being a fashion, that it was almost a second religion. The strongest man soon came to the fore, and around him were grouped a numerous body of minor lights, who worked with him, assisting him faithfully, earnestly, and admiringly, in the execution of his great works. In that way schools were formed, and a lad who entered one or other of those studios was kept under the influence of some master mind, and instructed with a thoroughness which it is impossible to attain on any other plan. In the present day, science had far outgrown her twin-sister art, and men were now forced to apply themselves to separate branches of science and art. While science had flourished altogether without precedent, and with the natural hardy growth of a native plant, art, on the other hand, seemed to be rather as a costly exotic, cultivated in accordance with the dictates of fashion. Probably, never had art been more propagated, more lavishly patronised, and less generally understood than at the present day. But our rage for art was not a national taste so much as a prevailing fashion. Another point in modern art-patronage seemed to him to be worthy of notice, as being peculiar to modern times—he meant the speculations in pictures both by dealers and by private persons. The artist, of course, reaped a pecuniary benefit from that quiet gambling, but whether it benefited his art or the reverse was an open question. With regard to the modern system, being under many professors, each with his own idea of style, often in direct opposition one to the other, could not fail to be very bewildering to the student and prejudicial to progress. The fact was clearly recognised by the best academies on the Continent, some of which had a number of studios attached, each presided over by one of the professors, who was obliged to receive a certain number of students as pupils. That was the case at Dresden, where he himself received the greater part of his professional education, the studio to which he was attached being that of Professor Schilling, the author of the great national monument which had just been unveiled in Germany. Having described the system of instruction there, he said a sculptor in England was assisted, not by men whom he had himself trained up, but by hired workmen. Although there was no doubt that this country had made very rapid progress in matters artistic, every true lover of art must feel that the present condition of things was not altogether satisfactory. We gave too much attention to the "cabinet" art; and decorative art—by which he meant a harmonious co-operation of painting, sculpture, and architecture—which he took to be the highest and noblest form of art, was left to take care of itself. In every work of art three chief points were to be considered—first its suitability to the purpose it had to fulfil, and to the place it was destined to occupy; secondly, its truth to nature; and thirdly, its beauty. But unfortunately most of the art that was produced was made for exhibition, not for decoration, so that they were forced to trust to chance for the first condition of excellence—suitability. They did know, however, that their work would probably be in conflict with all the other pictures and statues near it; and consequently the temptation was often irresistible to paint or to model in too high a key either for truth or beauty—to work for the public praise or to catch the eye of the newspaper critic rather than to carry out conscientiously one's own convictions of what was true and beautiful. Again, the architect was too apt to consider that such matters as sculpture and painting were trifles not worth troubling about, whilst the painter and sculptor on their part regarded his work as being merely a site for a statue or frame for a picture. It was hard to persuade a man that he was merely taking part in a trio when he fancied he was performing an important solo. Having strongly condemned the present system of competitions, especially in architecture, he said it was to the Academy exhibition that he would direct the attention of committees. If they would select an artist from the numbers of those there represented, and tell him what they wanted and how much they could spend, they would find it more satisfactory. His advice to young students was to avoid competitions. If they had time on their hands let them employ it in the production of the best and noblest work of art they were capable of, and, when they had done their utmost, exhibit it. They should all do their work for the work's sake—it was the art; and not the artist, that should be paramount. Mr. Simonds then referred to the art-criticisms of the public press, and concluded with a word of warning to those who had succeeded in gaining prizes, and of encouragement to those who had failed. There was no quality so dangerous to a young artist as very great facility, which often led to hasty and ill-considered work; there was no quality so valuable as a power of intense concentrated application. While he heartily congratulated those who had succeeded, he would urge them not to think their task easy or their burden light because heaven had given them the gift of speed and strength. To those who had failed he would say, "Be not discouraged; the race is not one against time, and patient industry and loving labour may enable the weaker man in the end to accomplish as hard a task as his stronger, but perhaps less earnest, competitor." Of them all he asked was that they would do all in their power for the advancement of whatever was good in art and in science. "Whatsoever things are lovely, whatsoever things are true, whatsoever things are of good report, if there be any virtue, and if there be any praise, think on these things."



## THE INCOHERENT ARTS.

PARIS is laughing just now over a curious picture show—the Exhibition of the Incoherent Arts, in the Galerie Vivienne. It is, says a correspondent of the *Manchester Guardian*, in some sort the revenge of the men who cannot find a place in the coherent arts. Once a year—at least this is the second year of it—a sympathetic member of that order invites all his fellows to send in their wildest inventions in satire of the great existing schools. It is peculiarly appropriate just now, while the solemn triennial show in the Champs Elysées is still open. In the one you see the schools on their serious side; in the other, you see them in caricature, and the caricature is by a long way the more amusing. The brush seems, after all, the best implement for satire on the brush. No doubt in time to come many of the contributors to this modest show, when seeking for admission to the Institute, will feel glad to buy up all the copies of a certain small yellow catalogue which recalls their participation in this practical joke. For the moment, however, they laugh without a thought of the morrow, and it is impossible not to laugh with them. Their fun is pretty equally distributed among all the schools. A distinguished impressionist on our side of the water comes in for a share of it in the painting of a *Nocturne in Two Voices*—a few dabs of red and a few dabs of white in a cloud of gloom. It is not only impressionist, but, say what you will, it is impressive in its suggestion of an infinite mystery of darkness, though it was certainly never meant to be that. This mark of the school—its taste for vast, misty effects—is shown again in the study of *Hyacinthe in London*. Hyacinthe, the actor, as every Parisian is aware, is famed for his abnormal development of nose; in the picture we see this organ, and this organ only, in the foreground of one of our densest fogs. The impressionists receive another hit in an absolutely empty frame labelled *A Painting of the Future*. The realists are even more severely treated. In the *Macaroni Harvest at Naples* we have a woman, with a bundle of sticks of real macaroni on her back, in a field covered with a growth of the same kind. The catalogue informs you that you are quite at liberty to taste and try. *An Egyptian Frigate Chasing Three Cholera Patients* belongs to the same school of art. The three cholera patients are three red herrings fastened to the canvas, and realistic in treatment beyond all doubt. The *Paris by Night* and *Paris by Day* cuts with a double edge at the Realists on one side, and at the Prefect of the Seine on the other, who has lately caused an all but absolute block of traffic by simultaneously repaving half the city with wood. This is not a picture, indeed, but rather a statuary group, made up of a wheelbarrow, a pickaxe, a shovel, and a lantern, in exact resemblance of the curious trophies of labour that are now to be seen everywhere in the streets. *The Genius of Naturalism*, dedicated to M. Emile Zola, is a figure of a winged boy with the head of a pig; and the *Portrait of M. de la Pommeroye*, the critic and lecturer, is realism carried to its furthest limit. Only the face is painted; the hair is real hair, the books in the foreground and the glass for water are real glass and real books, the eyeglass and the long drooping moustache are as real as all the rest. *The One-year Volunteer* is another portrait study, treated with all that originality of invention in this style which the younger painters have brought so much in vogue. It is merely a hand and arm, the hand gloved with that huge coarse mitten which the French linesman wears on public occasions, and which is his most distinctive mark. The theory, presumably, is that you are to represent your sitter by what is most characteristic of him, and the characteristic of the little French soldier is his big-gloved hand; all the rest of his body is mere detail. Another portrait is more fantastic still. This is the *Venus de Mille Os*, and it bears a marked resemblance to Madame Sarah Bernhardt. The face is the face of Sarah, but the body is made up of innumerable bones, a rather retrospective satire on her thinness, for she has long since grown as shapely as most of her rivals. In the military series we have several square yards of canvas, which are at the same time only so many square yards of battle smoke, with here and there a képi, and here and there a sword. They represent *Jena*, *Solférino*, *Magenta*, *Wagram*, *Austerlitz*; and you are to take your choice among them for any particular battle you want. There has been nothing more telling since that painting shown in a piece at the Variétés, which, if you held it up one way, was the desert under a blue sky, and if you turned it upside down was the Mediterranean under glowing heavens. The *Clarion sounds the Charge* is at once military and realistic. The warrior rushing at us right out of the picture is half painted and half real properties; his plume and his sword stand out in relief half a foot high. In the *Incoherent National Flag*, hung as a decoration on the staircase, the artist has finely typified the confusion of parties and factions as it must exist in the mind of a plain dealer. The ground of the flag is the red of the barricades, but this is dotted with the lilies of France; and the flagstaff is surmounted by the imperial eagle. Make what you can out of it; but then make what you can out of the politics of the day! *Genre* does not escape. The French have always had a certain contempt for those pictures representing domestic or everyday incident that find so much favour on our side. Here we have a study of a street bootblack and his customer. The customer is a mendicant friar without

shoes, and the astonished artist of the brush is asking him if he wishes to have the great toe blacked as well as the rest. The catalogue is a continuation of the jest; every artist, as in the dignified official volume of the Salon, is required to give his name and birthplace, and the name of his master. All sorts of names are given, partly no doubt from motives of prudence; and, still further to baffle inquiry, the birthplace is equally vague or misleading. One artist declares that he was “born at Bougival or elsewhere;” another, that he was born at Cape Horn; a third, that he [has really forgotten his baptismal name; a fourth writes himself down a “pupil of Rembrandt;” another is “self-taught but vaccinated;” and one dates from the madhouse at Bicêtre. This gentleman contributes a row of figures in gingerbread, which may be said to be the masterpiece of the department of sculpture. Grotesque as it is, the show may not be without a wholesome effect upon certain eccentricities of the art of to-day.

## THE LATE MR. J. H. CHAMBERLAIN.

WE regret to announce the death of Mr. John Henry Chamberlain, of Birmingham, who expired on Monday evening, shortly after the close of the lecture delivered by him at the Birmingham and Midland Institute. Mr. Chamberlain had, with much reluctance, but at the earnest solicitation of his colleagues upon the Council of the Institute, consented to allow his name to appear upon the lecture-list of this session; and, in accordance with his appointment, lectured that evening to a crowded audience upon “Exotic Art.” His remarks lasted a little over an hour, and were characterised by that happy commingling of earnestness and humour which rendered him among the most charming of lecturers. Within half an hour the lecturer had passed away from earth. In company with his wife, his sister-in-law, and his youngest son, and one of his daughters, he walked to the house in the Crescent of his friend, Mr. Lawson Tait, who with Mrs. Tait and Mr. Orford Smith, the town clerk, who was also of the company, had been among his hearers, to partake of supper before going home to his residence in Somerset Road. He appeared slightly but not over-fatigued with his lecture, and requested his companions on leaving the Institute not to walk too fast. He continued to chat pleasantly with Mr. Tait and Mr. Smith upon the way, and also upon entering Mr. Tait’s house. On ascending the stairs to the first floor, Mr. Chamberlain sat down upon a chair opposite a China cabinet, and appeared to bend his head forward. It was not noticed for a few seconds that anything was amiss, either by Mr. Tait, the town clerk, or Mr. Oliver Chamberlain, who were present upon the landing; but on Mr. Tait putting his hand upon his head to tell him that supper was ready, he fell heavily upon the floor dead. Mr. Tait endeavoured to apply restoratives, but it was evident that disease of the heart had caused instantaneous death.

Mr. Chamberlain, says the *Birmingham Post*, was born on June 26, 1831, at Leicester, where his father was a minister of a congregation of Calvinistic Baptists, in which denomination he held a position of eminence both as a pastor and a divine. The son was educated partly in Leicester and partly in a school in London. He had an early bias towards art, and, on leaving school, he was articled to Mr. Goddard, an architect of note at Leicester, with whom he remained for several years, and of whom, as regards kindness and ability, he often spoke in later life with much regard. On the completion of his term with Mr. Goddard, there was a brief interval of further study spent in a London office, and then Mr. Chamberlain received the impulse which for the rest of his life governed his own course in his art. He became an ardent student of the works of Mr. Ruskin—the earlier volumes of “*The Modern Painters*,” and especially of “*The Seven Lamps*” and “*The Stones of Venice*.” The last-named work, in particular, decided him to visit Italy, and to master for himself the great monuments of early Gothic architecture. To this task he devoted himself with characteristic ardour; making careful drawings of St. Mark’s, at Venice, and sketches and studies of details there and in other Italian cities. Fresh from this journey, fired with enthusiasm for early Italian art, and full of the teachings of Mr. Ruskin—of whom he remained always a devoted student and admirer, adding to this of late years the privilege of personal friendship—he came to Birmingham in 1856, and settled in the town to practise as an architect. The choice was determined by the residence here of a relative, Mr. Chamberlain, formerly the head of the firm of Chamberlain, King & Jones, then recently established as Eld & Chamberlain. The first work he executed was a house for Mr. Eld, situated at the corner of Ampton and Carpenter Roads, Edgbaston. It was a bold and striking effort for a young man; the style, a modification of Lombardic Gothic, differed widely from anything that had been seen in the town, and the design evoked much criticism, and not a little hostility; for, in domestic architecture at least, Birmingham was then given over to what, for want of a better name, must be called the Rectangular style, the houses being mainly straight-sided boxes of brick or stone, with regular apertures for doors and windows. In the following year 1857, Messrs. Eld & Chamberlain commissioned him to build their busi-



ness house in Union Street; and here again he repeated and amplified the experiment begun at Edgbaston. Immediately after this period Mr. Chamberlain entered into a brief partnership with his lifelong friend, Mr. William Harris, but this being dissolved, he resumed practice on his own account. For a considerable time his prospects were not favourable—the town did not take kindly to architectural art, and but for commissions received from other places Mr. Chamberlain would have found it difficult to maintain his ground. Amongst other works executed at this period were a school-house at Uppingham, for Mr. Earle; another school at Leicester, for Mr. Franklin (his own old schoolmaster); the Hollings Memorial Column at Leicester—a singularly effective work; a picturesque engine-house and other buildings at the Monument Road station of the Birmingham Waterworks Company; and the Wesleyan Chapel in Essington Street. In 1859 Mr. Chamberlain made a most happy marriage; his wife being the daughter of the Rev. Mr. Abrahams, a minister in London of the denomination to which his father had belonged. About the same time he attracted the notice and the friendship of the late Lord Lyttelton, for whom he executed various works. But the practice of his profession seemed to afford such a remote prospect of success that he was slowly forced to the conclusion of abandoning it, so far as Birmingham was concerned. In 1864 this design was almost matured. Through Lord Lyttelton's intervention an opening offered itself in the colony of New Zealand, where a cathedral, actively promoted by Lord Lyttelton, was to be erected at Christ Church. To the deep regret of those who recognised his genius as an artist, and who had learned to value his friendship, Mr. Chamberlain was on the eve of accepting the proposal above-mentioned, and of emigrating to New Zealand, when a change took place in his plans, which happily kept him in Birmingham. Through the intervention of friends a partnership was arranged between him and Mr. William Martin, then an architect in established practice, and who had much work in hand for the Corporation, and for other public bodies. This partnership, to last for twenty years, began on April 13, 1864, and has, consequently, nearly run its full course. It was a happy arrangement, for no two men so intimately associated could have worked together with greater harmony, or with fuller advantage to their clients, for while Mr. Martin was singularly gifted with skill in planning and construction, Mr. Chamberlain brought to the new firm the highest faculty of design and a marvellous fertility in beauty and variety of decoration.

It is almost impossible, within reasonable space, to record the buildings with which, in conjunction with his partner, Mr. Chamberlain has adorned Birmingham within this period of twenty years; and if these were examined in detail, and their characteristic merits adequately described, a volume would scarcely suffice. Amongst the most important must be placed the extension of the Institute Buildings, in Paradise Street, and the reconstruction and extension of the Free Libraries in Edmund Street—both of them singularly noble in their mass, and exquisitely beautiful in their details, alike of form and colour. Of the interior decorations of both edifices there is no need for us to speak; they are acknowledged by all who see them to be masterpieces of art. Another group of buildings of remarkable beauty and nobility consists of the out-patient halls of the Queen's Hospital, the Children's Hospital, and the Women's Hospital; and nearly opposite the last-named of these, in the Priory, is another singularly charming structure, the Fire Brigade Station. In a third group may be placed the numerous buildings erected for the Waterworks Department, both in Birmingham and at the great reservoirs at Whitacre. Here, in a remarkable degree, Mr. Chamberlain showed how beauty and utility may be combined; and, given the taste of the artist united with the skill of the constructor, how easy and how admirable it is to render attractive edifices which are usually characterised by heaviness and ugliness! Yet a fourth group is to be found in the examples of domestic and business architecture which bear the impress of Mr. Chamberlain's genius—such, for instance, among the former, as Mr. Joseph Chamberlain's house at Highbury, Mr. Deykin's in Somerset Road, Mr. J. A. Kenrick's at Berrow Court, the additions to Mr. Jaffray's house at Park Grove, the decorations of Mr. William Kenrick's house at Harborne, and last, but not least, the graceful building erected by the architect for his own residence in Somerset Road; and among the latter the stately line of business edifices which distinguish Corporation Street—for illustration, Messrs. Marris & Norton's, that exquisite gem (Mr. Avery's) at the corner of Bull Street, Mr. Daniell's premises, the Household Stores, and others. To the same class—a very noble specimen of it—belongs Messrs. Kenrick's showrooms and offices at West Bromwich. This, however, is but a skeleton list of the works in which Mr. Chamberlain had so large a share, and in which most of the decorative details were drawn by his own hand. Amongst the others may be mentioned several of the police stations in Birmingham, the admirable new baths in Monument Road, the Rubery Hill Lunatic Asylum, the free library, Constitution Hill, the dispensary at Nechells, several churches, such as St. David's, the church at Selly Hill, that at Franche, near Kidderminster; and in works of decorative art, the Chamberlain memorial, and the canopy to the Dawson statue. Finally, for we must close the long and noble catalogue, come the thirty Board schools, begun in

1871, and even now incomplete. These, if they stood alone, would form an enduring and a worthy memorial of Mr. Chamberlain's genius; they constitute a distinction of which no other town in England can boast. There is yet one more work to be mentioned—the design for the new school of art; it bears the last touches of the master's hand; and at the time of his death he was looking forward eagerly to the time when the foundation-stone should be laid. We are reluctant to leave this part of our subject without some remarks upon the marvellous fertility of Mr. Chamberlain's genius in the style of architecture which he had marked out as his own—his mastery of picturesque form; his exquisite sense of colour, in its fulness as in its delicacy; his remarkable power of conceiving and executing detailed ornament; his bold and skilful use of new or revived materials, such, for example, as terra-cotta and decorative tiles. Something, too, should be said of his admirable skill in designing stained glass, metal-work in iron and brass, and domestic furniture. In all these respects he was a master; it is hard to say in which he most excelled. Indeed, in work so infinitely varied, yet in quality so equal in its variety, he recalled the great Mediæval artists, to whom all arts of construction, design, and ornament were familiar, and who stamped alike upon mass and detail the unity derivable only from individual character and original genius.

But space warns us that from the artist we must turn to the citizen; and here, as in his professional work, it is not one man we have to portray, but many. Had he done less, Mr. Chamberlain might still have been spared to us. He had learned, however, to apply the injunction, "what thy hand findeth to do, do it with thy might"; and his hand found so much to do, that none could do so well, as to leave him no leisure for repose; and the strenuousness with which he did it gave him no chance of conserving or recreating vital energy. There is hardly a department of our Birmingham life in which, for nearly thirty years, we fail to find traces of him, and of late years there is scarcely one in which he failed to hold a place so prominent that he seemed to be indispensable. Yet this was from no seeking of his own. While he undertook a vast amount of public work, in addition to his professional labours, he never sought it. No man ever was more careful not to force his way to the front. The work came to him because he was felt to be the best man for it; and when it came, he did it, at whatever cost to himself. This was especially so in the great labour of his public life—the Midland Institute. When, in October 1864, he was elected on the council he declined the honour, but being chosen by the governors in January of 1857, he accepted the position as an important trust, and in the following year he consented to become the honorary secretary to the council, and this office he held without interruption to the day of his lamented death; his last service, indeed, being rendered in connection with it. One fact expresses and emphasises his work. When he undertook the management of the institute there were only a few hundred students. Thanks mainly to his energy, his devoted thought, his incessant labour in developing the classes, there are now over 4,000 students. It is the same with the subscribers; there were 600 when he took office; there are now nearly 2,000. It is the same again with the lectures; he raised these from a condition of decay and of indifference to one of excellence, which has no parallel in the history of such institutions throughout the three kingdoms. In regard to the school of art, his labours were not less eminent there than those in connection with the institute. He was appointed chairman of the committee in February 1874, and from that date to this the school, under his fostering care, has steadily and rapidly advanced in magnitude and influence. The Society of Artists was another organisation which engaged his peculiar care. He was elected a member in March 1861, and was appointed professor of architecture: and on the resignation of Mr. Hollins in 1879 he was elected vice-president. In all these capacities he rendered services of the highest value not only to the society itself, but to the whole community, by his admirable lectures as professor. These were the leading institutions in which Mr. Chamberlain was the leader and the mainstay of those who worked with him. But there were others which must be added to the list. For some years, while the Arts Department of the Queen's College was in existence, he was professor of architecture here; he was one of the founders and (with his friend Mr. Samuel Timmins) was the hon. secretary of the Shakespeare Memorial Library; for some years he sat on the committee of the Old Library, in Union Street; he was an original member of the Shakespeare Club, founded by his most intimate and beloved friend, Mr. George Dawson; he was chosen by Mr. Ruskin one of the trustees of the St. George's Guild; and finally, in 1880, on the joint recommendation of the magistrates and the town council, he was nominated one of the justices of the borough.

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**The Boys' Public High School Company of London** have selected the designs prepared by Messrs. Oliver & Leeson, of Newcastle-on-Tyne, and submitted by them in competition for the Company's first new school, which it is proposed should be built forthwith upon a site already secured at Westoe, near South Shields,



## NOTES AND COMMENTS.

THE Dublin Royal Institute of Architects has suddenly discovered that the sum mentioned in the instructions for the proposed museum is inadequate to produce a building worthy of the purpose. How much should be advanced is not stated. Considering that Kildare Street, where the museum is to be located, is not one of the principal streets in the city, and that the building will generally be visited at night by art students and craftsmen, the sum of 110,000*l.* is more suggestive of liberality than stinginess, especially when it is known that the decoration and furnishing of the museum and library will entail further expenditure under a new grant. The people of Edinburgh have somehow contrived to make profitable use of a museum that has cost the country a smaller sum. The objections that are raised against the arrangements will of course embarrass architects in England who are disposed to take part in the competition. They find the societies that are to use the building professing to be dissatisfied with the division of the space, their brethren in Dublin say the building is an impossibility unless there is an undefined amount of money forthcoming, and the Dublin newspapers, which create what is called public opinion in Ireland, are preparing the way for indignation meetings when the designs arrive in Dublin. Encouraged by their success in the first competition, when they monopolised the prizes, English architects might be indifferent to local agitation, but they cannot forget that the Government once succumbed to clamour, and may do so again. In fact, it may be said that the Irish genius for perplexing things has prevailed, and has added new risks to the competition system.

THE Dublin architects also consider "that the late competition was not satisfactory in the matter of an independent architectural assessor not having been engaged, as in other late important competitions; and that the result cannot be satisfactory to architects under the arrangements proposed as intimated in Mr. COURTNEY's letter of June 26, 1883." But for an architectural assessor there could be no better man than Mr. McCURDY, who was one of the five Irishmen who selected the designs in the last competition. His practice extends back for a great many years, and thus he should be more qualified than a stranger to understand what is and what is not suited for Dublin. Sir ROBERT KANE, who was another member of the Irish committee, has been teaching in museums and superintending them for nearly half a century. Would an architectural assessor from England have been more likely to select Irish designs? It is also forgotten by the Dublin Institute that architectural assessors do not always give general satisfaction. There has been much grumbling at the awards in Glasgow, Birkenhead, Birmingham, Newcastle-on-Tyne, Hawick, and other places, where there were no committees of selection.

MR. JOHN HENRY CHAMBERLAIN, who died on Monday night, was well fitted to hold authority in Birmingham. He was a Liberal of the Liberals, and was never more happy than when engaged in political meetings. His eloquence was remarkable, even in Birmingham, which abounds in good speakers. When the subject was related to art he was without a rival. Mr. CHAMBERLAIN had a good presence, a sympathetic manner, and a voice which was expressive of conviction. He had studied and travelled, and, more important still, he practised art. With so many qualifications, it is not surprising that his discourses always attracted crowds. He spoke without manuscripts, and he once told us that he avoided written speeches. Mr. CHAMBERLAIN was regarded as an almost infallible authority on art. His power was seen in such a case as the fiasco of the DAWSON statue. At the meeting he was able to control the aggrieved subscribers—a feat which no other man in Birmingham could have accomplished. Mr. CHAMBERLAIN was enthusiastic for the promotion of art in connection with the Midland Institute. He was the delight of students, and he retained himself much of the student's manner. This was the more remarkable as he had once been a college professor. The master whom he held in most esteem was Mr. RUSKIN, and his work often shows the influence of "The Seven Lamps." In private life Mr. CHAMBERLAIN's charming grace and good humour was almost enough to overcome any one who might

be envious of his success in monopolising the new buildings of Birmingham.

PROFESSOR JORDAN, the Director of the Russian Imperial Academy of Arts, died lately in St. Petersburg, at the age of eighty-three. He had a reputation as an engraver. A copperplate of *Mercury Imposing Sleep on Argus* received the smaller gold medal of the St. Petersburg Academy in 1824, and the engraving of *The Dying Abel* received the larger gold medal. JORDAN was then sent to Paris to prosecute his studies. On the outbreak of the revolution of July he was ordered to London, where he continued to work under RAIMBACH's direction on a copperplate of RAPHAEL's *Holy Family* (in the Louvre), which he had begun in Paris. In 1835 he went to Bologna, and thence to Rome, where he came under the influence of BRÜLLOW, at whose suggestion he undertook to engrave RAPHAEL's *Transfiguration* in the Vatican Gallery. This cost him eleven hours' work daily during eighteen months. JORDAN, like some other artists, thought he might settle down in Rome, and he became a domiciled citizen. But in 1850 he returned to St. Petersburg, where he was at once made Professor at the Academy. Three years later he went back to Italy, settling at Florence, but in 1855 he was recalled, and made Professor of Engraving at St. Petersburg, and Conservator of the Engravings Section of the Collection at the Hermitage. In 1870 he was appointed Rector of the Academy. Only a month before his death he was engaged on some portraits, which he has left unfinished.

MR. CHARLES ROWLEY, jun., has been reading a paper at the Manchester Literary Club entitled "A few more Noticeable Pictures in the Art Gallery Exhibition." Mr. ROWLEY, after commenting on works by GÉRÔME and other noted painters, fell foul of Mr. J. D. LINTON's *Admonition*. Although full of the finest work, according to Mr. ROWLEY, it is most provoking. In spite of technical excellence, it never touches the heart. You do not know what it is all about, and are so absorbed in the beauty of the work that you do not care. Some might regard that as a triumph, but there can be no vitality in art or literature except they have something to say, no matter how perfect the form may be. Even in such noble handiwork as this the absence of dramatic force, of motive, points to artistic decay, and not to life. Sir FREDERICK LEIGHTON when asked to design a picture to be called *The Arts of War*, has given us not a drama from the teeming life of Florence, but a group of Florentines doing nothing in particular, but everything in general that can be done with swords, banners, armour, and the rest. These things, he maintained, tend to substantiate the charge that we moderns in England have no idealism. Mr. ROWLEY evidently is an admirer of that class of art which corresponds with Transpontine dramas of the old school, where there is an unlimited amount of action and plenty of fighting.

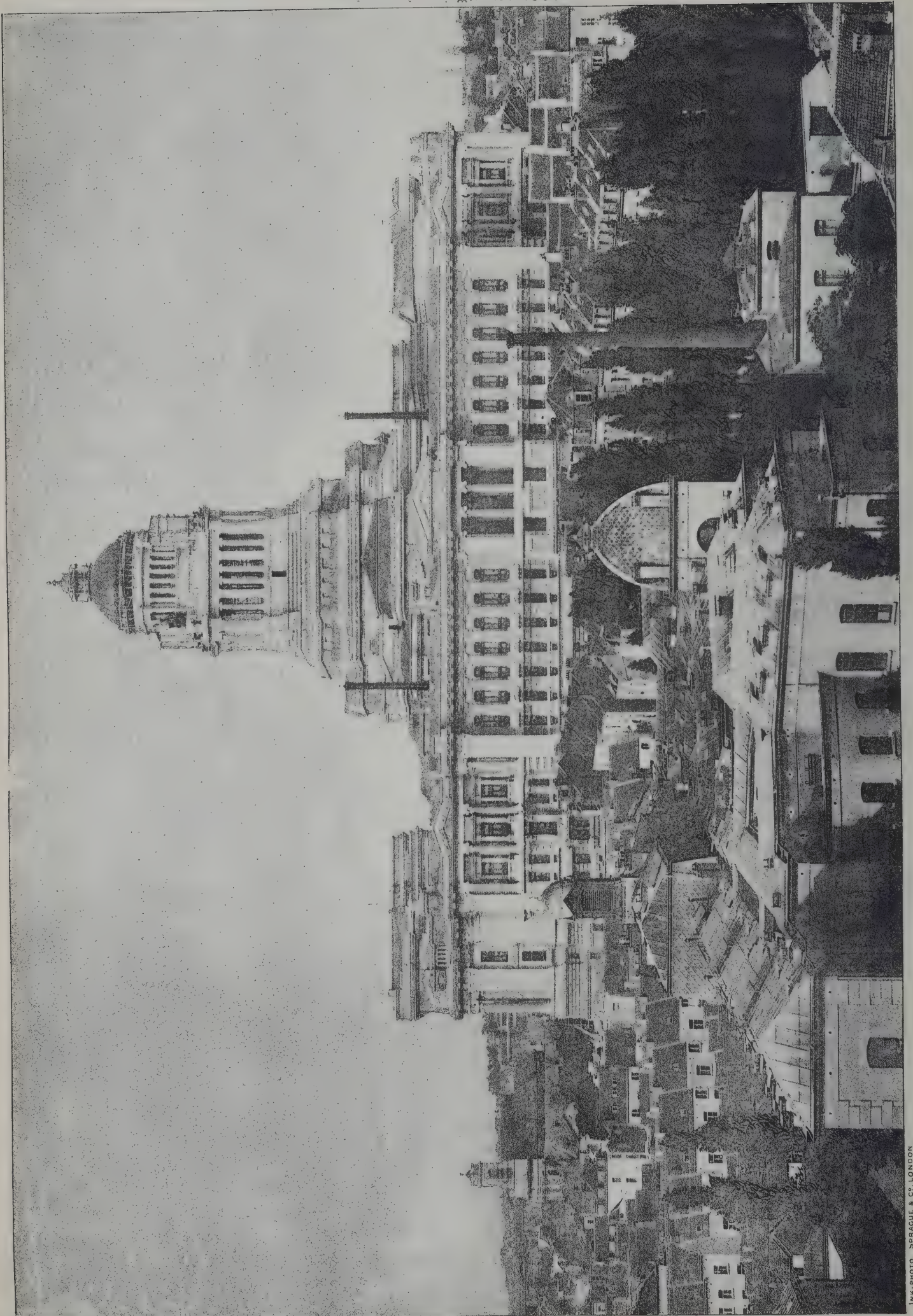
SOME of the country members of the British Archæological Association have been visiting some of the buildings connected with lawyers in London. At the Record Office several of the national treasures were displayed to them, including "Domesday Book;" the Privy Seal Grant, temp. RICHARD II.; the Treaty of Castile, between ALFONSO and HENRY III. (having a massive gold seal appended to it); the final Treaty between HENRY VIII. and FRANCIS I., relating to the Field of the Cloth of Gold; and the Pope's famous Bull in gold, from CLEMENT VII., according to HENRY VIII. the title of "Defender of the Faith." The Rolls Chapel was visited in order to see the splendid monument of Dr. YOUNG, by TORREGIANO. It was described by the late Sir DIGBY WYATT in a paper read at the Institute of Architects, and is much less known than it deserves, being one of the best examples of Renaissance art in England. The Temple Church, Middle Temple Hall, the Chapel Royal, and the Roman Bath in Strand Lane were afterwards seen.

MR. EDWIN LONG, R.A., has completed his large work *The Flight into Egypt*, and on Sunday last it was on view at the artist's studio. It will shortly be transferred to Messrs. FAIRLESS & BEEFORTH's gallery, for which it was painted. There will then be opportunity to compare modern English and French treatment of religious subjects.







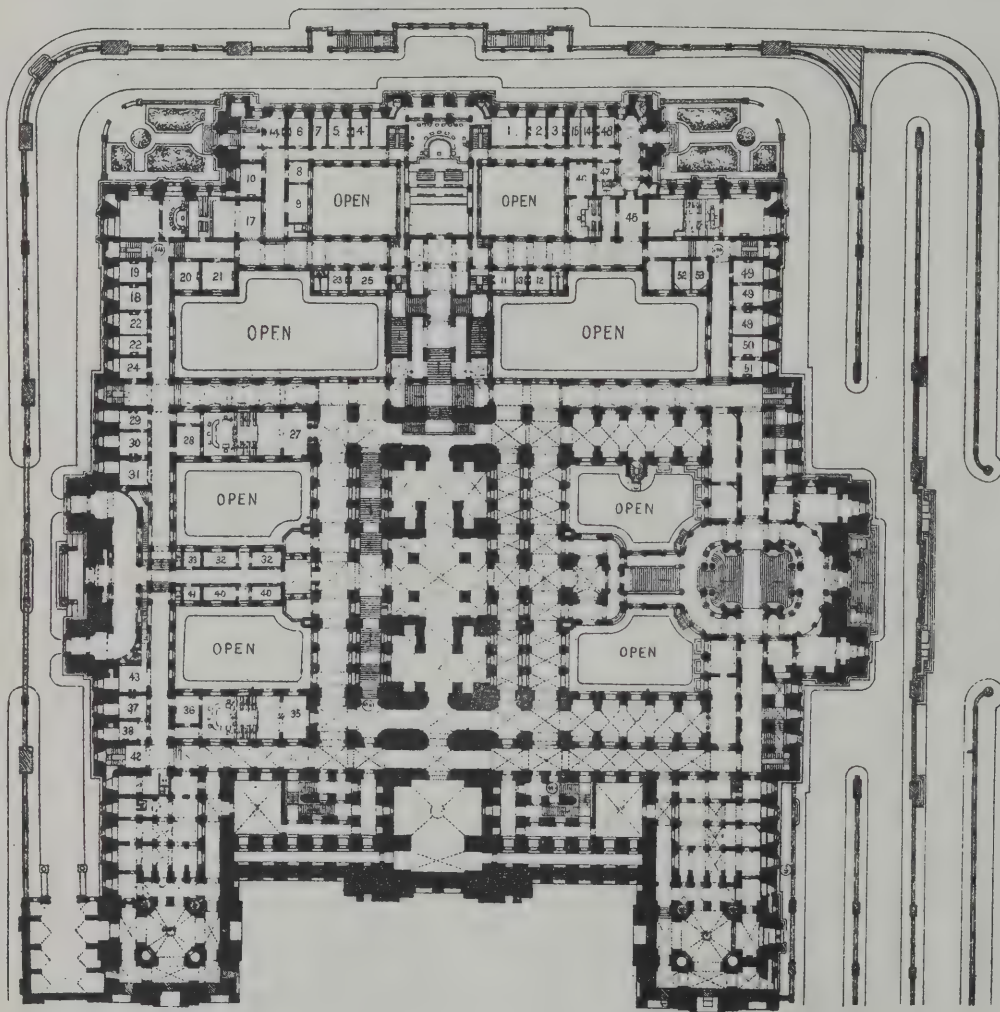


NEW PALACE OF JUSTICE, BRUSSELS.

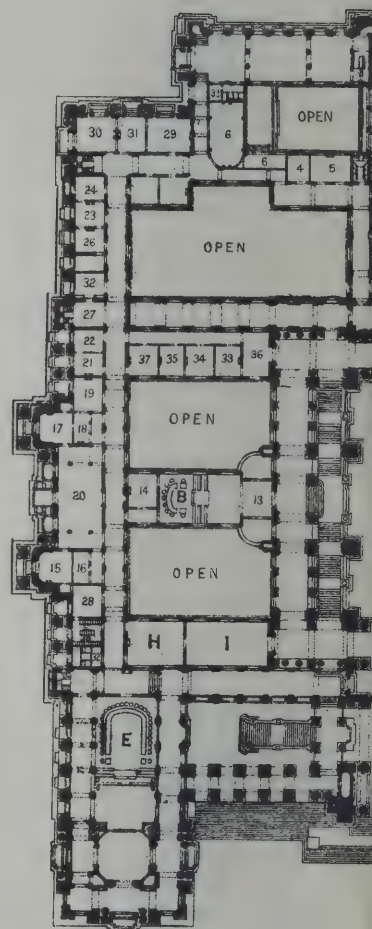








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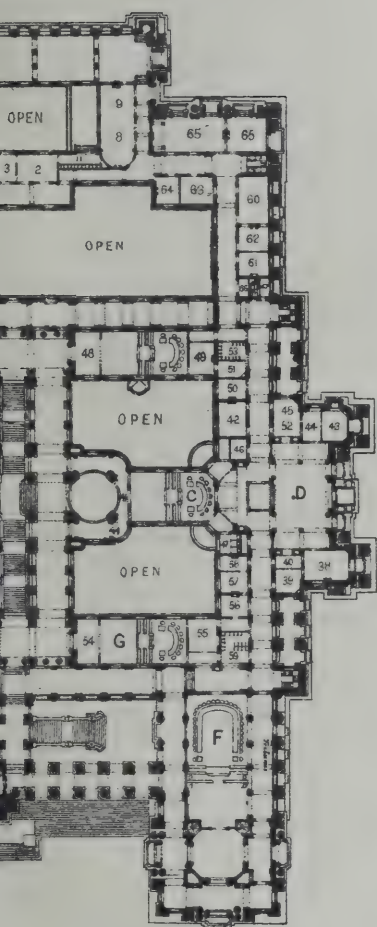
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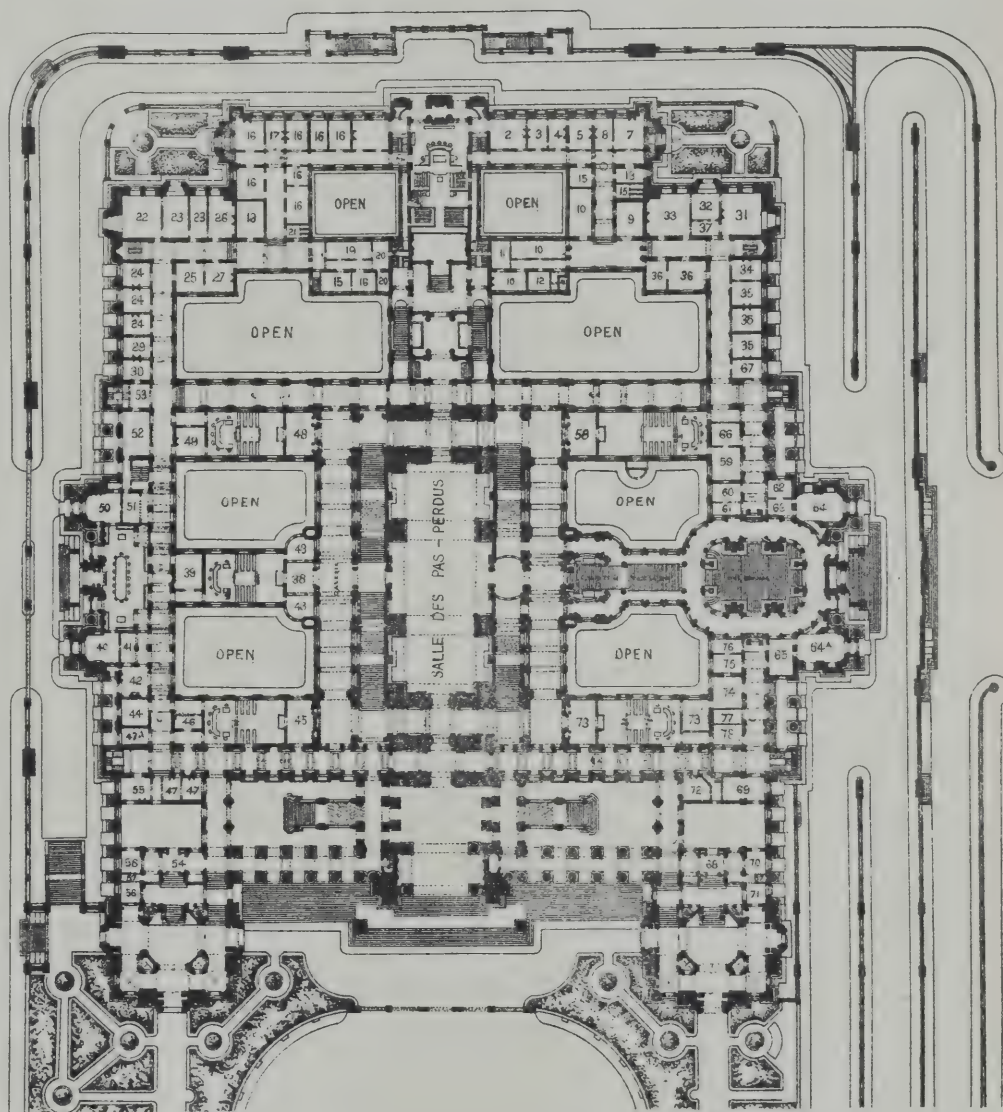
THE LATE M. P. G.



27<sup>th</sup> 1883.



FLOOR.



GROUND PLAN.

STICE, BRUSSELS.

T, ARCHITECT.

Spiegel & Co. 22, Marous Lane, Calcutta St. EC













ALEXANDRE PHOT

"INK-PHOTO", SPRAGUE & CO., LONDON.

NEW PALACE OF

THE LATE M



27<sup>th</sup> 1883.



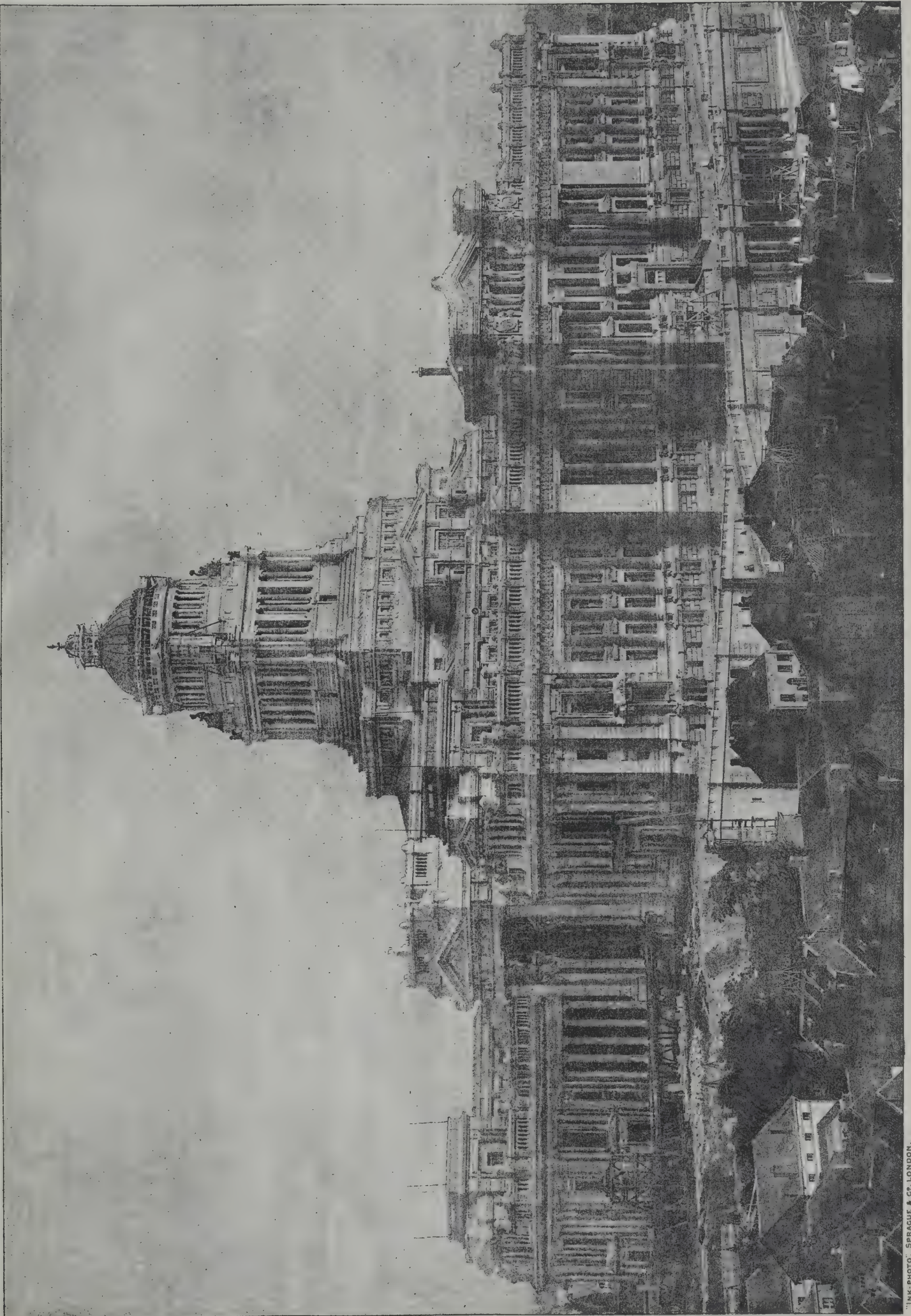
JUSTICE, BRUSSELS.

ART, ARCHITECT.









NEW PALACE OF JUSTICE, BRUSSELS.  
THE LATE M. POELAERT, ARCHITECT.







## ILLUSTRATIONS.

## NEW PALACE OF JUSTICE, BRUSSELS.

WE publish this week views of the new building in Brussels, which was designed by the late M. POELAERT. A description of it appears on page 250. The following table will explain the numbers on the plans:—

LOWER GROUND FLOOR.		PRINCIPAL FLOOR.	
COUR MILITAIRE.		TRIBUNAL DE COMMERCE.	
1 Chamber for consulting	14 Prisoners' staircases	1 Antechamber	16A Physicians
2 President	15 Water-closet	2 Consultations	
3 Antechamber		3 President	
4 Secretary		4 Vice-President	
5 Deputy		5 Witnesses, &c.	
6 Auditor-General		6 Registrar	
7 Auditor		7	
8 Registrar		8 Meeting-room	
9 Clerks		9 Bankruptcy	
10 Library		10 Messenger	
11 Evidence for prosecution		11 Robing-room	
12 " " prisoner		12 Water-closet	
13 Accused		COUR DE CASSATION.	17 Antechamber
14 Ushers		13 Antechamber	
15 Robing-room		14 Consultation-room	
16 Water-closet		15 First President	
		16 Antechamber	
		17 Procureur-Général	
		18 Antechamber	
		19 Advocate-General	
		20 Library	
		21 Secretary	
		22 Employés	
		23 Chief Registrar	
		24 Clerks	
		25	
		26 Ushers	
		27 Messenger	
		28 Robing-room	
		AVOCATS.	
		29 Meeting-room and library	
		30	
		31 Antechamber	
		32 Clerks	
		32A Water-closet	
		REGISTRAR.	
		33 Registrar	
		34 Clerks	
		35	
		36 Messenger	
		37 Consultation	
		COUR D'APPEL.	
		38 First President	
		39 Antechamber (public)	
		40 " (ushers)	
		CHAMBRE I.	
		41 Antechamber	
		42 Consultation	
		43 President	
		44 Antechamber	
		45 Prosecution	
		46 Robing-room	
		47 Water-closet	
		CHAMBRE II.	
		48 Antechamber	
		49 Consultation	
		50 President	
		51 Antechamber	
		52 Judges' chamber	
		53 Antechamber	
		54 Offices	
		55	
		56	
		57 Staircases	
		CHAMBRE III.	
		48 Antechamber	
		49 Counsel	
		50 President	
		51 Antechamber	
		52 Judges' chamber	
		53 Antechamber	
		54 Offices	
		55	
		56	
		57 Staircases	
		CHAMBRE IV.	
		58 Antechamber	
		59 Counsel	
		60 President	
		61 Prosecutor	
		62 Registrar	
		63 Antechamber	
		64 Clerks	
		64A Summoning officers	
		65	
		66 Robing-room	
		67 Water-closet	
		CHAMBRE V.	
		68 Offices	
		69	
		70	
		71	
		72	
		CHAMBRE VI.	
		73 Antechamber	
		73A Consulting-room	
		74 President	
		75 Antechamber	
		76 Prosecutor	
		77 Robing-room	
		78 Witnesses	

Mr. Reynolds Rowe has purchased a central site in Cambridge, upon which he intends to build and endow a large free and open church, dedicated to St. John of Jerusalem. The scheme includes an infirmary for the use of members of the University, a training-school and home for nurses ready for engagement in private houses, and an ambulance centre for instruction.

The Rose Window of Lerwick Town Hall is to be filled with stained glass, and a design having been prepared showing the arms of all the ancient Norse provinces in the various circles, the chief magistrate of the county of Bergen, Norway, has intimated his desire that five of the circles in the window should be reserved for stained-glass shields to be presented by Bergen. No other window now remains to be filled.

## THE NATIONAL GALLERY.

THE passing of the National Gallery Loan Act in the last session of Parliament has been followed, says the *Times*, by considerable alterations in the arrangement of the Gallery. The Act, it will be remembered, gives power to the trustees, under certain limitations, to lend pictures to provincial museums, it being understood that the pictures so lent will be confined to the English school. During the last two months Mr. Burton has been busily engaged in carrying out the preliminary steps for taking full advantage of the Act. That is to say, he has been removing from the walls such English pictures as he proposes to lend, together with a number of others, which, if the truth must be told, are not worth wall-space, either in the National Gallery or anywhere else. The very ample Turner collection has not yet been touched, but it is felt that a considerable number of the works of this great master can be spared, and probably they will be transferred to new quarters within a short time.

It was found that the space thus gained would, by careful management, give just one room to be filled, and the question then arose, what rearrangement would be most effective. Mr. Burton has decided upon moving the Peel collection bodily from the lofty corridor, where it lately hung, to one of the rooms in the old part of the building, which it exactly fills, and where there can be no doubt that it is much better seen. The corridor in question is now filled with large and important Italian pictures, many of them recent acquisitions that have been till now hung on screens in and about the long gallery. The great *Assumption*, by Botticelli, purchased at the Hamilton sale, occupies the centre of the right-hand wall, being faced by the large picture of Ercole di Giulio Grande, while the two magnificent Signorellis, one of them the Hamilton picture and one lately bought in Italy, hang on either side of the doorway. Comparatively little alteration has been effected in the long gallery itself, except by the removal of these pictures. The screens still remain, though, as they are at present hung with smaller paintings, they do not seem, as they did a few months ago, to stand in the visitor's way and mar his enjoyment of the pictures on the walls. The chief actual addition to this room is Veronese's beautiful *St. Helena*, which has been transferred from its old quarters to its natural position among the principal Venetian pictures. The removal of this and one or two other paintings has enabled the director to devote the first room of Mr. Barry's new building exclusively to Spanish pictures, of which the gallery is now seen to possess examples which are not only fairly numerous, but are of great artistic interest. Among them is now to be seen for the first time the curious early Velasquez—if we are to accept the attribution—lately presented to the nation by Sir John Savile Lumley. This picture, which is sometimes called *The Institution of Prayer*, represents a child led by an angel to the scourged Christ; and, although the subject is no less painful than that of the majority of Spanish religious pictures, there is no denying its power. It must be added that the great Tintoretto, *Christ Washing the Disciples' Feet*, which Mr. Burton so cleverly managed to acquire at the Hamilton sale, has now been brilliantly restored, and hangs in the next vestibule above the *Bacchus and Ariadne* of Titian. It is much to be regretted that space could not be found for this most noble picture on the line. There seems, indeed, to be a fate which forbids the world to see Tintoretto well. His best pictures at Venice are in a building, the Scuola di San Rocco, where one has to judge by faith rather than by sight; and, now that we at last have a fine example in the National Gallery, it has been found necessary to hang it so high that no one can fairly examine or enjoy it. Let us hope that when the Government has made the contemplated additions to the building, which we have long ago described, a worthy place will be found for this masterpiece.

The construction of the building makes a really scientific classification of the pictures according to their schools an impossibility, and Mr. Burton has perforce to content himself with something short of an ideal arrangement. Little by little, however, he is succeeding in bringing order into the collection. Thus the early Italians have now two rooms to themselves; the Florentine and other mid-Italian masters are grouped on one wall of the long room; and the Venetians come fairly together on the opposite side. The most precious pictures in the gallery form a little *salon carré*, or tribune of their own, in which, by the way, the new Antonello da Messina is by no means the least important object. Most of the early Flemish pictures hang together in the small gallery above the staircase, the room having been lately enriched by Antonio Moro's superb *Portrait of a Girl*. Considerable readjustment has also taken place among the English pictures which have been left, the works of separate masters having been brought together and some kind of chronological order having been attempted.

A Science School is to be established in Kidderminster. The mayor has been informed that if 1,000*l.* in addition to 460*l.* voted from the surplus of the Worcester Exhibition be subscribed, the funds for the erection of the building will be provided by a gentleman who withholds his name.



## EXOTIC ART.

ON Monday evening Mr. John Henry Chamberlain delivered a lecture before the members of the Midland Institute, at Birmingham, and by a sad fatality it was destined to be his last public address.

Mr. Chamberlain's subject was that of "Exotic Art," and in commencing he referred to the article by Mr. W. J. Stillman, upon "Characteristics of London," in the current number of the *Century Magazine*. The writer, condemning in no sparing terms the architectural features of the metropolis, said: "It is impossible to say that artistic feeling is exotic in England, not knowing with absolute certainty whether they were Englishmen who built the magnificent old cathedrals or not; but it does seem that, since the race was what it is, anything æsthetic is a chance flower, and of so rare occurrence that its exceptionality—its want of visible cause and effect in precedent or succession—proves the rule more clearly than though no example had ever been found." Had he a favourable opportunity, Mr. Chamberlain thought he might convince the author of that article that without doubt they were Englishmen who built the old cathedrals. He would be able to show him that at the time those buildings were erected the whole of England was covered more or less with artistic work, and that the whole of it was produced by Englishmen. He was, however, prepared to agree that, although it was not always so, art in England had been to a very great degree exotic for 300 years. They might begin the period of English art at 1050, when it was just beginning to bud. 1550 might be regarded as the central period—a period of change; and 1850 or 1851 was the period of another great change. He was inclined to think that the essayist in the *Century Magazine* was a little too sweeping—he was a little stronger ally than he quite relished. It was as though he (the lecturer) were hesitating as to what kindly words he could use to hint that someone else was a little vague in matters of account—that he did not quite know the difference between that which was his own property and that of others, and that a third person interposed and said, "Oh, the man's been a thief and a swindler, and ever since he was born." What did they mean by exotic art? An analogy was afforded in gardening by the culture of exotic plants. In introducing exotic plants, or foreign ornament—exotic ornament—what they endeavoured to do what was to endeavour to reproduce under entirely new conditions, the particular products formed by some other and differing conditions. They must do either one of two things; either the imports must be acclimatised, or must acclimatise themselves, or they must make artificial conditions to suit them. In gardening these artificial conditions could be furnished by means of glass houses, but they could not make artificial conditions of that kind with regard to art. They knew perfectly well that if they planted a tropical palm-tree in cold English clay it would not flourish, and they soon saw that it was dead. But with regard to art, the majority of them did not know this. They went along the streets of their cities, and they did not know death from life, although there abounded matters of art which were as dead as any tropical plant would be if planted in an English garden and left out for the winter. If he were to define what exotic art was he would have to give two or three different definitions. They might call it, if they pleased, "foreign art out of place," or "foreign art reproduced under false conditions." Perhaps the best definition would be the negative one—that it was art that could not possibly be evolved from the natural conditions of the country or the race using it. People were apt to think of art as a fashion, and to overlook that it was a form of life, and therefore a perfectly natural development depending upon the conditions of the country, and the people amongst whom and by whom the art was evolved. In illustration of this Mr. Chamberlain pointed out that an Englishman, if left to himself and not copying some other nation, would not build a pyramid or an obelisk, or design a building upon the lines of the Parthenon. Englishmen of themselves would never have built buildings like the British Museum or St. Paul's, or in Birmingham a church like St. Peter's in Dale End—never; neither would they have developed any of that exotic or foreign ornament which was to be seen all over England. He did not say with respect to some of this art that it was not beautiful. He simply said it was not English. In emphasising that art should possess a meaning to the artist and that it should produce joy to the beholder, Mr. Chamberlain traced upon the blackboard lines similar to the channelling upon stone to mark the regular blocks, together with the picking out of the surface, called rustication or vermiculating. "Does that," he asked, "impress you with any sense of light?—because art is to make you happy. Is anyone the happier for seeing that? And yet I suppose some millions have been spent in England during the last three hundred years in repeating forms like that upon the stone of public buildings." In considering how far the charge that English art was exotic extended, the lecturer excepted painting and sculpture; but as regarded the two remaining branches of architecture and decoration, he powerfully urged the importance of their being free from any trace of foreign art. He dated the decline which had taken place from the endeavours which succeeded the revolution against mediævalism to imitate both in literature and art the pattern of the ancients.

They became acquainted in this way with the "five orders," with pediments, and balustrades and urns, and with all the "properties" of the pagan dressing-room. These were as much properties as the costumes of an actor were when hanging in his dressing-room, for the reason that they were divorced from the life of the people who used them, and were brought into a country which had very little in common with that life or the necessities that guided it and made it what it was. They were brought here because they were admired, and because it was easy to import them. At last by the time they arrived at the year 1851, it might be said that art in England was practically dead. Nobody talked about it, and it was an unpopular subject. At this time, however, a change began in the revival of the English Gothic—a style which was not brought from a foreign soil, but which was fitted to the wants of the people, which appealed to their sympathies and satisfied their passions. This prepared the ground for the recognition of art and the care for it. The same period was the commencement of a new outburst of English activity, the evidence of which they saw all around them. New countries had been discovered, photography had come to their help, and as the result they had gained a much wider idea of art than formerly obtained. At the same time this very development had in many ways increased their exoticism, because when the examples of the art of many countries had been brought here everyone tried to copy them. The art treasures brought from other countries were very charming to have as possessions and to admire; but let them not think that by their means they could ever make real or living art for themselves. The remedy for the evil of which he complained lay in the recognition of the truth that all art was the expression of idea. It was like speech, if they had nothing to say they should not try; but if they had something to say in art, let them first see whether the idea was theirs or belonged to someone else, and then see whether they had adequate expression for it. If a man was an artist, Heaven had given him a faculty of expression, and this was the main difference between artists and other men. The artist's main idea—the one thing necessary from the smallest scholar to the greatest artist—was simply admiration. Having this admiration, they must try to use it honestly, without affectation, and in the way that was natural to them. If they found in exotic art the revelation of the ideas that were dear to them, let them use it by all means if they could find no other vehicle—only let them be sure that the forms they made to tell other people what they saw were forms which they enjoyed. To the musician the beauty of this world was shown through music, to the artist it was shown on his canvas, to the architect it ought to be shown in the stone with which he had to deal, and in the bricks which he might mould into the forms in which he willed them to appear; and the sculptor, instead of his art being dead, ought to be able to take up our common and ordinary life, and show us not only its variety, but also its grandeur, nobility, and poetry. He would conclude with a little bit of Mr. Tennyson, from which they might take pattern:—

And I must work thro' months of toil,  
And years of cultivation,  
Upon my proper patch of soil  
To grow my own plantation.  
I'll take the showers as they fall,  
I will not vex my bosom;  
Enough if at the end of all  
A little garden blossom.

In the votes of thanks at the close, moved by Councillor R. F. Martineau, and seconded by Mr. G. S. Mathews, the former, referring to the manner in which Mr. Chamberlain had carried out the lessons he taught, remarked that it might be said to those in that theatre that if they sought his monument let them look around them.

## THE ROMAN OCCUPATION OF BRITAIN.

IN the second of the present course of Rhind lectures the Rev. Dr. Collingwood Bruce continued his narrative of the Roman occupation of Britain, from the time when Vespasian assumed the purple. Early in this reign, he said, the limits of the Roman province, which in the time of Claudius had been marked by a line extending from Gloucester to Colchester, were advanced northward so as to be represented by a line extending from Chester to Lincoln. In the year A.D. 78 Agricola was appointed governor of Britain, and in this post he was continued by the two subsequent emperors, holding it in all for seven years. An account was given of this general's campaigns, and it was stated that he usually spent his winters in promoting the arts of peace, and securing in this way his conquests. He saw, the lecturer remarked, that there were many abuses in Britain to reform, and he reformed them. The taxes pressed heavily, but the extortions of the tax-gatherers were more odious and intolerable than the taxes themselves. These abuses Agricola remedied. He encouraged the people to build temples, courts of justice, and commodious dwelling-houses; he established a plan of education, encouraging the sons of the chiefs to acquire a knowledge of the Roman tongue. Roman apparel was recommended, and the toga became fashionable. As



regarded the progress of his conquests, Agricola, in his second year, seemed to have overrun that portion of England lying between a line drawn from the Dee to the Wash on the south, and one running between the Solway and the Tyne on the north. In his third campaign he carried his forces among new nations, and advanced northward as far as the estuary of the Tay; and it was not improbable that, before making this advance, he had grasped the throat of England by planting forts on the more important points of the isthmus between Tyne and Solway, where Hadrian afterwards built his wall. The progress made in the Caledonian campaigns was traced so far as the scanty materials available to the historian permit; and the lecturer dwelt at some length on the question that has arisen in regard to the site of the great pitched battle with Galgacus, the native general. This engagement, according to Tacitus, was fought at Mons Grampius. The most recent editor of the works of Tacitus said the word should be "Graupius"; but where, asked Dr. Bruce, was Graupius? Mr. Hill Burton informed them that the Grampian Hills got their name from this misreading in Tacitus' Life of Agricola. The name Grampian, Mr. Burton said, was no later than the revival of classical literature, and was adopted from Tacitus when his works came to be read by the chroniclers. It was unknown in old documents, and, indeed, achieved a place in geographical books long before it was sanctioned by local use. As to the locality indicated by the historian, Dr. Bruce quoted a variety of opinions, including those of writers who had placed it at Comrie, at Fortingall, and on the moor of Ardoch. He himself inclined to the view of Mr. Skene, which pointed to the peninsula formed by the river Islay with the Tay. Leaving Agricola's administration with the remark that with the close of Tacitus' life of that general our continuous information as to the history of the British province ended also, Dr. Bruce passed rapidly to Hadrian's visit, rendered necessary by the unsatisfactory state into which the affairs of the island had fallen. The sixth legion brought over by this emperor probably came, he remarked, to the Tyne. There was recently dredged from that river an altar dedicated to Neptune; as if the soldiers, after experiencing the perils and discomforts of the German Ocean, had been profoundly thankful once more to set foot on solid land, and so expressed their gratitude to the deity to whom they owed their preservation. After observing that for our knowledge of Hadrian's proceedings in Britain we were chiefly indebted to the spade of the excavator, Dr. Bruce said that, first of all, the emperor looked to the state of the roads by which his troops might at any time be rapidly moved. Mile-stones bearing his name were still in existence, two having been found within the last month or two; and it was he who built the wall across the lower isthmus, between the Tyne and the Solway. The campaigns of Lollius Urbicus, including the construction of the rampart known as Graham's Dyke, between the Firths of Forth and Clyde, were next touched upon; and the subsequent incidents of the Roman occupation passed in rapid review, down till the year 406, when the requirements of Rome rendered it necessary that the legionary troops should be withdrawn, and Britain was left in a miserable condition. The lecture was illustrated throughout by reference to Roman coins, of which numerous drawings and enlarged photographs were exhibited, and *apropos* of which the lecturer took occasion to commend the ancient practice of preserving in the coinage a pictorial history of passing events.

Dr. Bruce commenced his third lecture by noticing first that at the beginning of the fifth century the legionary forces were withdrawn from Britain to defend the capital, and that the Roman occupation then came to an end. The lecturer proceeded to ask the question, "What could have induced that people to interfere with us?" There could be little doubt that Cæsar was mainly animated by ambition in his invasion of our island, but Cæsar's ambition would not account for the costly expeditions of Claudius and Vespasian, Hadrian, and other emperors. They must have anticipated substantial advantages. The government of Rome, in the time of the emperors, must have been carried on at enormous expense, and the revenues for this purpose were chiefly derived from the provinces. Tacitus told them that "Britain contains, to reward the conqueror, mines of gold, silver, and other metals," and it was certain that mines of tin, copper, lead, and iron were extensively wrought by the Romans from the time of Claudius downwards. Corn was also exported. Another object the Romans had in view in adding new territories to their empire was to provide settlements for those of their soldiery who had completed their period of service. This was done in Britain, and farms were doled out to the veterans, which were no doubt wrought by the native population. On all hands taxes were levied to pay the expenses of the State. Britain could not have been a poor country during the time of the Roman occupation. The number of towns and cities, the populousness of some of these, the luxurious character of the villas which were from time to time brought to light by the spade of the excavator, the rich and tasteful ornaments which were found associated with the dust of the departed in their burial-grounds, all testified to the fact that the occupation of this island of cloud and fog and rain, of long nights and dreary winters, was not an act of pure generosity on the part of her civilisers. Depend upon it, they made it pay. After an enumeration of the visits paid to Britain by many noble Romans, Dr. Bruce next spoke of the writers

who had described the works that the Romans had left behind them. Chief among these were William Camden, the father of British archaeology, and author of the "Britannia" (1586); Alexander Gordon, whose book, the "Itinerarium Septentrionale," was published in 1726; William Stukely, who, unfortunately for his own reputation, introduced to English antiquaries as a genuine work the clever forgery entitled "De Situ Britannicæ, by Richard of Cirencester;" John Horsley, the author of the great work "Britannia Romana" (1732); the Rev. John Hodgson (1845), who wrote a history of Northumberland; and Robert Stuart, the author of "Caledonia Romana" (1845). Going on to refer to the Roman roads, camps, and walls in Britain, the lecturer remarked that it might seem strange that he gave roads the first place. He did so because the Romans knew their importance. Troops went all the more boldly forward when they knew that they had the means of bringing up supplies, and, if need should occur, of effecting a safe retreat. Occupying the whole civilised world, and some of the uncivilised, as their domain, Rome was under the necessity of having the means of readily communicating with every part of it. On looking at a map of Roman England, they could not but be struck at the complete network of roads which overspread the land, and doubtless many existed of which no trace could now be found. By way of showing how well ready access to the great centres of population was provided for, it was mentioned that seven roads were known to have branched off from London—though it was not then the capital; Wroxeter was the centre of five roads, and six started from Manchester. Scotland was not so well provided with roads as England; just because it was not so tightly held in hand. The Watling Street of the North of England was, however, brought into Scotland, and, passing the Eildon Hills, was continued to Cramond, at the eastern extremity of the Antonine Wall. A branch of this road, starting from near Corbridge, in Northumberland, was continued as far north as Berwick; the Maiden Way, coming from Kirkby-Thore, in Westmoreland, crossed the Roman wall at Carvoran, and then proceeded by way of Bewcastle into Scotland. How far it went was not known. On the western side of the island a military way proceeded from Carlisle, through Dumfries and Lanarkshire, to Dumbarton, at the western extremity of the Graham's Dyke. All these roads were carefully paved. That the structure of the Roman roads was considered to be something extraordinary by the mediæval inhabitants of the country was evident from the fact that they considered them to have been the work of wizards; and one of them—that from Corbridge to Berwick—was called the Devil's Causeway. There were resting-places for travellers at reasonable distances, and the roads were also provided with mile-stones, which were cylindrical in form, 2 feet in diameter, and stood above the ground 6 or 7 feet. They were usually inscribed with the name of the emperor in whose reign they were erected, and the number of miles that the spot was from the next station. The emperor was lord of the road, and any offence committed on it was an offence against Majesty. The same idea had descended to modern times, for they commonly talked of the king's or queen's highway, and an highway robbery was yet an aggravated offence. A Roman mile might roughly be stated at 7 English furlongs. Most of the Roman mile-stones in Britain had perished. Two, however, stood in the places where they were put by the Romans—one in Northumberland, the other in Westmoreland. About seventy others were to be found in museums. Two were in the museum in Edinburgh. How numerous were the cities and camps between which these roads afforded communication was evident from the frequency with which the names of places, even at the present day, ended in "caster" or "chester"—the Gothic form of *castrum*, and in "caer," the Celtic form of the same word. Besides that, many of the cities, such as York and Chester, bore to this hour the form of a Roman camp. In Scotland the remains of Roman towns were not nearly so well marked, or so numerous as in England. The earthen camps which were met with in many places were conceived on a grand and colossal scale, but they seemed to have been places only of temporary military occupation. A few places, however, had all the marks of having been occupied by colonists engaged in civil pursuits. On the eastern coast they had the town of Inveresk, where a Roman altar had been found, as well as the foundations of an extensive Roman building, and coins and vessels of Samian ware. It was not likely that the bold position of Edinburgh would be overlooked by the Romans; and the remains found in the city went far to strengthen the opinion that the Romans had a station there. At Cramond, at the base of the Eildon Hills—where was a fortified camp of some importance—at Paisley, and at Camelon there were likewise evidences of Roman occupation for other than military purposes; but none of them had the decided characteristics which marked the English towns. It was quite evident that the hold which the Romans had, even of that part of the country south of Graham's Dyke was very slight. Dr. Bruce, in conclusion, gave an interesting description of the wall or barrier, which crossed the lower isthmus of the island, from Wallsend-on-the-Tyne to Bowness-on-the-Solway, and which was 74 miles in length. It consisted, he said, of two principal parts—the *muris*, or stone wall, and the *vallum*, or earth wall, together with a military way and camps. The opinion at present generally entertained was that these works



formed parts of one great design, and that all were originally constructed by Hadrian (A.D. 120). On the supposition that the works formed one great design, the *murus* was probably intended as a defence against the north, and the *vallum* as a defence against the south, for although the tribes to the south had been subdued their fidelity could not be relied on. It was supposed that the wall was 12 feet high, with a battlement of four feet, and that it was 9 feet in thickness. The highest piece of it now standing was 9½ feet high. It was likely that the wall had been constructed by forced labour, and, if that was so, the Britons had no easy task. Stationary camps, or barracks for the soldiery who garrisoned the wall were provided at an average distance along it of about 4 miles, and in addition there were attached to it mile castles and turrets—the former of which, in all probability, had been intended to receive detachments of soldiers, and the other for sentries. The lecture was illustrated by views and ground plans of many of the buildings referred to.

### THE PARISIAN MODEL.

WHOEVER has sufficiently studied the Parisian artist would do well, says a correspondent of the *Standard*, to cast an eye on the Parisian model before the type has lost its ancient characteristics. Respectability has not yet quite planed and whittled the model to its own dull level, but the doom is approaching. He is no longer the eccentric personage of Théophile Gautier's art-essay, "pouring, like the *Moses* of Michael Angelo, a river of beard down a doubtful frock-coat; a fellow whose eye said, 'Admire me—I am Jehovah, Jupiter, the Scamander river; I am a doge, a hermit, a hangman.'" In days not so long ago one might see at the private views of the galleries, dressed with a certain pretentious slovenliness, women with Hebrew faces, whose busts disdain the aid of corset-maker, stopping before the Astartes, the Nymphs and Undines, and smiling at their own faces, happy to have lent their bodies for the creations of an artist's ideal. They were the models who took part in the quarrels of the schools, according to their Greek or Mediæval type:—

Classiques bien rasés, à la face vermeille,  
Romantiques au visage blêmi—

But these models hardly exist now in greater numbers than the painters costumed like Murillo and Vandyck, wearing Rubens' hat and the chemisette of Raphael. The pure-blooded model is disappearing from circulation, and such as are yet extant have only melancholy legends to recite concerning the decadence of their art—for art they hold it to be. Préault, the sculptor, was a great authority on models; the brothers De Goncourt consulted him when composing their elaborate artistic novel "*Manette Salomon*;" only Préault libelled the profession, having an exaggerated estimation of the superiority of other days. This period of degeneracy, however, contains its notable models in sufficiency—Lambert, for instance, who is a veritable fellow-worker with his painter, and will stiffen his muscles during three hours to give his *collaborateur* a correct attitude, and who will end his sitting aching in every limb for the love of art. A man called Leclerc is held invaluable by Paul Baudry. He can pose as man or woman, and divines the very attitude desired by inspiration. And this is by no means the only example of the model's imagination coming to the assistance of the artist's. When Henner was competing for the Prix de Rome, which he won with his *Death of Abel*, the little model allowed him in his lodge helped him with suggestions and encouragement. "If I were you," he advised, "I would put a cudgel there on the ground—that which has just killed Abel"—and in truth that little piece of realism gives the picture nearly all its originality. The models of the last generation were nearly all the counsellors of their employers—Duborg, who left a legacy to the most meritorious *débutant* of the year; Sinel, who was a "super" of the Odéon and the Théâtre Français, and wore the *peplum* like a Greek hero; Cadamour, whom Bauville has celebrated in rhymes rich as the traders who published them; Caroline l'Allemande, who was not only a model herself, but a keen-scented discoverer of models; Vuagnat, a clock-maker now, and formerly one of the special models of the Fine Art School, were public functionaries, earning eight hundred francs a year. The latter not only gave artistic counsel to the pupils, but also lectured them morally. "Work, young men, that is the only royal road. Never be turned away from it by vain amusement," &c. Vuagnat was the Hannibal, the Witikind, the Hercules, and the Girondin of Delaroche. Other old models are curiosity-shop keepers—there is a notable one in the Rue Drouot. Cot *fils*, who is *fils* still, albeit eighty at least, is a still more ancient celebrity. His father, a model before him, introduced him as a youngster into the studios of Girodet and David. He is an artist himself, and is said to have achieved some very presentable water-colour sketches. He knew the dignity of his art, and has declared, "I don't frequent people who paint *genre* pieces." When Benjamin Ulmann produced his picture, *Prussians Pillaging a Farm*, Cot refused to know him. Such a derogation from a former Prix de Rome was too great.

In Cot's time the classic model earned three francs an hour;

but the amateurs stepped in with their plethoric purses, and straightway the market price rose to five francs for men and ten francs for women. The exactions, the affectations, have increased in like proportion. Many models decline to sit for less than a day, and some insist that a cab shall be sent for them. The model De Nittis, engaged for his *Frileuses*—the Bois de Boulogne skating scene—required chocolate and Turkish tobacco. The little Italian models come from the Abruzzi and the Basilicate; you may see them, melancholy as the Cervarolles of Hébert, playing their eternal *morra* in dark taverns at the foot of the Buttes-Montmartre or the Mont St.-Geneviève. They are not ranked high in the model scale. Every organ-grinder and hurdy-gurdy boy is a model at certain moments. The market is overstocked. There are families of them, like that of Giovannina, whose brother Bernardino was the original of Degeorge's admirable *Bernardino Cenci*, which is now at the Luxembourg. The military model is a curious variety of the species. He is nearly always an old Guardsman, whom you see in Prussian uniform before Detaille, in the red trousers of the Line facing De Neuville. He is clean and honest and punctual, as a rule; but art is not his strong point, and his tobacco is strong indeed. A number of models exercise several industries. Henri, the Communal colonel, was the original of ever so many colonels on canvas before he became one in reality; Saint-Denis, who poses for the Parisian, rough or exquisite, is a house-painter in summer. There is a *concierge* model; and there are several Jewesses, who sell lace and cheap trinkets when no painter needs their mute and motionless services. The Jewesses have occupied a conspicuous place among the models since the *grisette* went out with Vernet and Géricault. They came in after the taking of Algiers. They were everywhere—with Ingres, with Delacroix, with Horace Vernet; they were the Muses of the modish Orientalism of the moment—intelligent, graceful, and rapacious as harpies. They identified themselves with "their" master; said, "We have a first medal," or "The jury has behaved with infamous injustice towards us"; and, in fine, they became, in their own artistic circles, almost as famous as the pictures in which their effigies appeared. The girl who posed for Gérôme's *Phryne* was known as "Phryne" to the end of her life.

The social steps by which one descends to an artist's platform are not difficult to describe. The men, with a consciousness of a fine face and figure, with no trade, and no desire to learn one, are caught at a chance hostility over a glass of "blue" wine, and adopt the profession as the most democratic royal road to doing nothing. Give them their pipe, when the painter is receiving visits or washing his hands, their five francs at the end of a *séance*, often curtailed by caprice or lassitude, and they are happier than their class-mates—the mason with his trowel, the iron-worker with his hammer. For the women the profession is a safeguard—it saves them from worse professions; and the pride they take in it is at times ludicrous, if indicative at the same time of respectably honest principles. There are girls who boast that they only sit for their hands, and others who only condescend to represent ladies of title, and "only to M. Heilbuth *encore*!" The failures of the Conservatoire are a rich source for the artist *querens quem devoret*. The little theatres exhausted, hard lines at home, the softer lines they suggest to the painter of pleasant and piquant Paris visions are too easily sold to be kept long out of the market. And then one profession does not prevent the other. You may be a pretty actress and a pretty model at the same time. The Republic is not yet Draconian, and has not prohibited that cumulation of functions—art in the studio and art in the green-room. Marthe Miette, one of the liveliest soubrettes of the Palais Royal, has been one of the liveliest models in a dozen Paris studios; and Mlle. Meyer, who "created" the "Vénus de Gordes" at the Ambigu, was a famous representative of the highborn lady in many a studio where ladies have never ventured, and gentlemen rarely. A Vaudeville actress gave M. Gervex his wonderful head asleep in his scene from De Musset's "Rolla." These are nearly always models *con amore*; they respect the art that perpetuates their beauty. Let a stranger enter the studio where they are posing, it is a brief good-bye; and the painter sees them no more.

The life of the old model, the Jupiter maimed by rheumatism, the Juno with chilblains and a snuff-box—that is a story of realistic melancholy that only Balzac could fitly render. Such as have found it impossible to establish themselves, who have remained the utter Bohemians their calling almost compels them to be, these are the dread and horror of the studios where they may have been employed, the nuisance of the artistic taverns and *brasseries*, where they earn their absinthe by anecdotic garrulity. Most of them are literally supported by the alms of old patrons and the occasional gratuities of young neophytes, who gather from them many a trait of an old master whereof the outer world knew nothing—traits of character and trickeries of execution. The master is not by any means a hero to his model. They will tell you frankly that Ingres was hard, rude, violent, and treated his models like dogs. Delacroix was gentle and suave as a woman; Delaroche elaborately polite. He asked a man who sat for the *Passage des Alpes* to change his attitude, with the prefix of "Mille pardons, Monsieur." Gérôme has also the reputation of a bland master; but Tassaert is the favourite. Tassaert gives you wine, and jokes with you. Horace Vernet was even more amiable; he



had a collection of military witticisms at the tip of a ready tongue, and the laughter he is said to have inspired must have rendered his models excellent studies in epilepsy. Pradier, the sculptor, had the same happy temperament, and sang and chattered like a bird while he worked like a giant. Now, they will all tell you the model is simply an article of commerce. The relations between him and his hirer are simple—those which link the bought and the buyer. Gustave Doré had the old frank friendliness with his models; but then he had—he needed—so few. The Bonnats, the Bouguereaus, the Carolus Durans are rigid gentlemen, who have their models paid by their valets, and scarcely open their lips during a *séance*. True, they sell a picture for fifty thousand francs; while Heim sold one that contained sixty-six figures for three thousand. Putting the artistic value aside—and Heim was not disgracefully inferior to any one of the artists named—look at the cost of the models! No wonder the groups you may see expectant in the Place Clichy have a harder and more pragmatic look than their predecessors. The salt has almost gone from out their lives; they can only fraternise with the beginners and the failures, who are, like themselves, the supernumeraries of art.

### EDINBURGH UNIVERSITY BUILDINGS.

**D**URING the summer vacation important alterations have been effected in the south-east quarter of the Old University Buildings. A new senate hall, ante-room, retiring-room, and vestibule have been formed in the space formerly occupied as the librarian's house, while the old senate hall, with its ante-room, has been converted into a public office and secretary's office; the rooms hitherto used for those purposes, together with the basement and upper storeys of the librarian's house, being thus rendered available for the greatly increased requirements of the library. The entrance to the senate hall is by a doorway in the middle of the south-east quadrant of the courtyard, where a Doric doorpiece has been introduced, and the internal walls pierced with wide archways, admitting ample light to the inner vestibule, from which a wide and well-lighted passage leads to the hall. The senate hall proper is 36 feet long, 24 feet wide, and 18 feet high, the ante-room being divided from it by a screen with Ionic columns and wide sliding-doors, admitting of the two apartments being thrown into one, measuring 48 feet in length. An ornamental cornice in keeping with the columns runs round the room. Above it is a curved coving with moulded ribs, which are continued across the ceiling, dividing it into panels, two of which are furnished with ventilating gas pendants. The alterations, which have been carried out at the cost of 1,200*l.* to 1,300*l.*, and which included the removal of some very strong walls and the introduction of massive iron beams, have been carried out under the direction of Mr. Morham, city architect, by Messrs. Wm. Beattie & Son, the decorative painting being executed by Mr. Andrew Muirhead. It should be mentioned that an important feature in the senate hall is the chimneypiece, which is of white marble, the frieze being decorated with a mythological subject, the figures of which are admirably grouped and finely modelled in high relief. This frieze has been in the possession of the Senatus of the University for a long period, and we understand that an offer of a large sum of money for it was recently refused. The jambs consist of terminal figures, the whole being surmounted by a richly-moulded cornice. The walls of the hall are decorated with numerous portraits—several of them being by Raeburn—of former principals and professors of the University.

### THE NEW PATENT LAW.

**W**ITH the object of affording information to the public until the new rules under the Act are completed the following information is issued by direction of the Board of Trade:—

"1. Applications and all other documents will be required upon strong, wide-ruled foolscap paper (written or printed on one side only), having a margin of 2 inches on the left-hand part thereof. The use of parchment will be discontinued. Copies of specifications will no longer be required.

"2. The sizes of the drawings will remain unchanged, but they will be required upon drawing-paper instead of on parchment. A copy of the drawings will be required upon thin Bristol board.

"3. Forms of application (stamped) will be placed on sale at the chief post-offices in the United Kingdom.

"4. The forms required for an application will be—(a) for provisional protection—application form and form of provisional specification; (b) for complete protection—application form and form of complete specification. Where a complete specification is not left in the first instance, it may be left at any time within nine months after application for provisional protection.

"5. The fees will be 1*l.* for each stamped form of application and 3*l.* for each stamped form of complete specification. No fee will be charged for the form of provisional specification.

"6. Applications may be left at the Patent Office or sent by post. If sent by post, they must be addressed to the Contrôller, Patent Office.

"7. The 'declaration' in the application form must be made by the inventor or inventors. All other documents may be prepared and signed by agents.

"Note.—'Applications' for letters patent made during the present year must be proceeded with in accordance with the existing laws and rules."

### ARCHÆOLOGY.

**A Lost City of Mexico.**—Ancient ruins, which surpass anything of the kind yet discovered on the American continent, have been found in Sonora, about four leagues south-east of Magdalena, Mexico. There is one pyramid which has a base of 4,350 feet, and rises to a height of 750 feet. It has a winding roadway from the bottom leading by an easy grade to the top, wide enough for carriages to pass over, which is many miles in length. The outer walls of the roadway are laid in solid masonry from huge blocks of granite in rubble, and the circles are as uniform and the grade as regular as could be made at this date by the best engineers. To the east of the pyramid a short distance is a small mountain about the same size, and rising to about the same height. On the sides of this mountain a people of an unknown age have cut hundreds upon hundreds of rooms, from 5 by 10 to 16 or 18 feet square. These rooms are cut out of solid stone, and so even and true are the walls, floor, and ceiling, so plumb and level, as to defy variation. There are no windows to the rooms, and but one entrance, which is always from the top. The rooms are 8 feet high from floor to ceiling. On the walls are numerous hieroglyphics and representations of human forms, with feet and hands of human beings cut in the stone in different places. Stone implements of every description are to be found in great numbers in and about the rooms.

### CHURCH BUILDING AND RESTORATION.

**Bilston.**—The parish church of St. Leonard's has been reopened after restoration. Upon the exterior 1,777*l.* have been spent, which was voted by the town out of the 3,000 guineas received from the late Mr. Edwin Pugh for the sale of the advowson. This work, which has been carried out by Messrs. Higham, of Wolverhampton, has consisted in the complete recasing of the church in cement, the rebuilding of the tower in stone, restoration of the approaches, &c. The interior renovations have been defrayed out of a special fund raised for the purpose, and have been under the direction of Mr. Ewan Christian. The reseating of the floor and the new galleries are the work of Messrs. Lynex, of Walsall.

**Keighley.**—The corner-stones of a new church proposed to be built in Park Lane, Keighley, have been laid. The church will be dedicated to St. Paul. It will accommodate 500 worshippers, and also serve the purpose of a Sunday-school. The estimated cost is about 2,000*l.*, exclusive of site, which is the gift of the Duke of Devonshire. Mr. J. B. Bailey, Keighley, is the architect.

**Twyford.**—The church of St. Mary has been reopened on completion of structural extensions. The church was erected in 1847 from designs by the late Mr. Benjamin Ferrey, F.S.A., in a style based on the Early English, consisting of nave, chancel, south aisle with lean-to roof, small vestry, and an open oak porch. The church has been enlarged by the addition of a north aisle and a new vestry and organ chamber, under one roof, on the south side of the chancel. The roof to the new aisle is open and of English oak, plastered between the rafters, nearly corresponding with the existing work. The new benches are of English oak, of similar design to the old ones, on a boarded floor. The contractor was Mr. Weyman, of Henley-on-Thames, who has carried out the work from the designs and under the superintendence of Mr. B. Edmund Ferrey, F.S.A., of Spring Gardens, London. The clerk of the works was Mr. George Chinnock.

**South Littleton.**—The church of St. Michael, South Littleton, has been opened, after a complete restoration of the nave and chancel. The oldest existing part of the building dates from the twelfth century, but the marks of burial found underneath the foundations indicate that an earlier church was built upon the same site, which may have been Saxon, or even British. The present restoration has been carried out by Mr. Thomas Collins, of Tewkesbury, from designs by Mr. F. Preedy, architect, and adheres as closely as possible to the plan of the old edifice, the ancient parts of which have been carefully preserved. The renovation of the interior of the tower has still to be carried out.

**Seaham Harbour.**—A new Presbyterian church has been opened. It is built of common bricks, with freestone dressings, and relieved with pressed brick bands and arches. In the south-east corner is a tower and spire 70 feet high. The roof is covered with blue slates, with bands of green slates and ornamental tile ridging. The windows are glazed with cathedral tinted glass with coloured



border. The whole of the woodwork of the church is executed in pitch pine, and sized and varnished. The work has been done by Mr. R. Allison, Whitburn, under the superintendence of Mr. N. Macara, Darlington, architect.

**United Free Church, Clitheroe.**—Ten sets of plans were sent in for this competition, and the premiums have been awarded to the following architects: 1. Mr. William S. Varley, F.R.I.B.A., Blackburn; 2. Mr. E. S. Butterworth, Rochdale; 3. Mr. H. Isitt, Bradford.

**Sowerby, Leicestershire.**—The restoration of the chancel of the fine old church of All Saints, which has, through decay and dilapidation, fallen into disuse for some years, has at last been completed. The works comprise an entirely new roof of increased pitch, new gable and parapets, restoration of doorway and windows, new tile floor, oak benches, and altar-rail. Four of the windows are filled with stained glass by Messrs. Lavers, of London. The metal work is by Mr. Braun, of Birmingham; the tiles from Minton's well-known works; the builder was Mr. George Hayes, of Melton Mowbray; and the architect, Mr. R. W. Johnson, also of Melton, under whose superintendence the main body of the fabric was restored some years ago. As now completed, it forms one of the finest village churches in Leicestershire.

**Leadhills, N.B.**—The foundation-stone of a new Free Church at Leadhills, Lanarkshire, was laid on the 19th inst. by Mr. Jas. Alexander, of Glasgow. Some special interest is attached to the occasion from the fact that this will be, when completed, in point of altitude, the highest church in the United Kingdom, the village of Leadhills being, *vide* the gazetteers, the highest inhabited village, and the site of the church is at the highest part of the village. The church is situated on the main road to Wanlockhead, and is designed in a simple type of Early English Gothic. The principal front looks towards the village, and has a lofty centre gable rising over 50 feet above the road level. The lower portion has four small lancet windows lighting the vestibule, and set between massive buttresses, while the upper part is filled with a large triplet window under a moulded hood; and on the ridge over this end is set a quaintly-designed ventilator *flèche*, rising to a height of 70 feet. On the side next main road the front is flanked by a handsome stone belfry carried up on a very massive buttress, which also protects the main entrance door; and on other side is a semi-octagonal transept, containing the stair to gallery, and also another entrance. The side elevations have single-light lancet windows between heavy buttresses. Owing to the nature of the site, the floor-line is over 10 feet above the main road level, and the church is reached by broad flights of steps up from main road and down from road of opposite side. The interior is 62 feet long by 32 feet wide, with a ceiling height of 30 feet, and will seat 360 persons, each having full 20-inch sittings. The main couples of roof, which rest on carved stone corbels, will be exposed and stained and varnished, and it is intended that the whole interior will be suitably decorated. The windows will be glazed with antique cathedral glass in leaded quarries, and through the kindness of a subscriber all the windows will be partly enriched with stained glass. There are also provided session-house, vestry, retiring-rooms, &c. The materials used in the building are the local whinstone, with freestone dressings for walling. The roofs will be covered with Westmoreland sea-green slates, finished with red ridge tiles, and, as is required by the situation, all the work is proposed to be of the most substantial description. The building has been designed by Mr. J. B. Wilson, A.R.I.B.A., architect, Glasgow, and is being carried out under his charge, at an estimated cost of under 2,000*l*.

## GENERAL.

**A Portrait**, by Mr. Oulless, R.A., has been presented to the Bishop of Norwich by his clergy.

**The Works of the late P. F. Poole, R.A.**, will be exhibited at the Royal Academy in the forthcoming winter exhibition.

**The London Winter Exhibitions** will commence to-day (Saturday) with the private views of the Dudley Gallery and of the collection of the works of the late Hablot K. Browne ("Phiz"), at the gallery of the Fine Art Society.

**The Duke of Westminster** is about to present to the National Gallery of Canada a large oil painting of *The Death of General Wolfe*, being a well-executed copy of the original by Benjamin West, belonging to the Duke of Westminster, and which is in His Grace's collection.

**An Exhibition of the Works of Sir Joshua Reynolds** will be held during the winter at the Grosvenor Gallery.

**Mr. Thomas Heron**, of Manchester, has been awarded a silver medal at the Fisheries Exhibition.

**Messrs. Minton, Hollins & Co.**—By an oversight the word "Limited" was added to the advertisement of this firm in the last number of *The Architect*. We regret the error, which has been rectified. There is no change in the style or title of the firm of Minton, Hollins & Co.

**Mr. R. C. Woodville** has been commissioned by Her Majesty to execute a large picture of the battle of Tel-el-Kebir as seen from the position in the rear where Prince Arthur was with his regiment of the Guards.

**David Cox's** *Peat Gatherers in a Storm*, 15 inches by 10½ inches, dated 1850, was sold in Birmingham on Tuesday for 120 guineas. At the same sale *The Pass of Llanberis*, with figures and drove of oxen, 21 inches by 11½ inches, dated 1847, was sold for 84 guineas; and *The Big Meadow at Conway*, 28 inches by 17 inches, fetched 206 guineas.

**Mr. J. N. Mappin**, who died on Monday last, has left his collection of pictures, valued at 60,000*l*., to Sheffield, with a sum of 15,000*l*. towards the erection of an art gallery.

**The Entire Collection of Bewick Prints and Books** that belonged to Isabella Bewick, the last surviving daughter of the famous wood engraver, will shortly be sold by auction at New-castle.

**A Statue of Goldoni**, the Italian dramatist, is about to be inaugurated in Venice, where so many of his pieces were first brought out. The statue has been modelled by Antonio dal Zotto, and cast by Arquati. It will be placed in the Campo San Bartolomeo, opposite the Merceria.

**Mr. W. B. Barbour** has offered a sum of money to the Paisley Art Institute, for the endowment of ten yearly scholarships and other prizes for local students.

**The Mayor of Sheffield** (Mr. Michael Hunter, jun.) has guaranteed the raising of the 5,000*l*. required to erect museum buildings to contain Mr. Ruskin's collection.

**Mr. Henry Holtom**, architect, of Dewsbury, will, it is understood, be the mayor of Dewsbury for the coming year.

**A Pulpit**, designed by Mr. Aston Webb and executed by Mr. Forsyth, of Worcester, has been erected in St. Helen's Church, Worcester.

**Mr. Ruskin** intends to deliver a lecture on "The Stormclouds of the Nineteenth Century," at the London Institution, early in February next.

**Mr. R. F. Hayward** has been awarded the Gilchrist Entrance Scholarship in Engineering, at University College, London.

**Sir Edmund Beckett** has contributed 200*l*. towards the erection of a new church and school at Doncaster.

**Earl Granville** has decided to erect a structure on his Cliff's End estate as a memorial of the landing there of St. Augustine.

**St. George's Church, Edgbaston, Birmingham**, is to be enlarged, at an estimated cost of 6,000*l*., from the designs of Mr. J. A. Chatwin, of Birmingham.

**The Municipal Art Galleries** in connection with the free library buildings were opened at Cardiff on Tuesday evening by the mayor, Mr. G. A. Stone. The nucleus of the galleries is a collection of thirty-eight pictures, presented by the late Mr. W. Menelaus, of Dowlais, estimated to be worth 10,000*l*.

**The Chorlton Board of Guardians** have decided on plans for the extension of their hospital accommodation at a cost of about 19,000*l*.

**The New Metropolitan Opera-house at New York**, which was opened on Tuesday, is the largest opera-house in the world, the dimensions of the auditorium being 95 feet deep, 89 feet wide, and 82 feet high; and the stage 106 feet wide and 90 feet deep.

**The Church of St. Matthew**, Friday Street, Cheapside, is about to be taken down. The materials of the church have been sold by tender by Messrs. Fuller, Horsey & Co. A few months ago the internal fittings of the church were sold. Business premises are to be erected on the site.

**The Tender of Messrs. Wilkes & Co.**, of 17 Devonshire Square, Bishopsgate, has been accepted for the construction of the Hartlepool tramways.

**A Petition** has been presented from some of the ratepayers of Raglan, Monmouthshire, asking the Assessment Committee to increase the assessment of Raglan Castle. The Duke of Beaufort has signified his intention to close the castle to the public if the increase is allowed.

**Sir Charles Dilke** visited on Tuesday the new buildings in connection with the St. George's Workhouse and Infirmary, and expressed himself gratified with the completeness of all the arrangements. The infirmary is the largest in London, being erected for the accommodation of 800 patients. The workhouse will, when completed, contain nearly 1,500 inmates. Mr. H. Saxon Snell is the architect of the new buildings.

**New South Wales** now has 412 brick-fields, 9 drain-pipe manufactories, 98 limekilns, 13 potteries, and 12 tile works. There are over 200 saw-mills. In one establishment about 100,000 cubic feet of timber are sawn weekly.

**The Fitzwilliam Museum Syndicate** state in their annual report that the building of a new Museum of Classical and General Archaeology has been commenced, and is now almost completed. The Fitzwilliam Museum was visited by 48,482 persons during the year ending April 30, 1883. Permission was given during the same period to 42 persons to copy in the picture gallery, and to six in the sculpture gallery. Donations to the museum are acknowledged from Professor Legros, the Master of Trinity, Mr. F. J. H. Jenkinson, M.A., and Mr. Spence George Percival.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, OCTOBER 27, 1883.

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

### TO AMERICAN SUBSCRIBERS.

*All subscriptions are payable one year in advance, and may commence at any date.*

*The cost of one year's subscription, mailed free, is 20s. sterling per annum, and Post Office Orders for that amount can be obtained at any Post Office in the United States.*

*Post Office Orders should be made payable at Lombard Street Post Office, London, but SHOULD BE ADDRESSED TO GILBERT WOOD, 175 Strand, W.C., London, England.*

*In order to meet the difficulty which constantly arises from subscribers in the United States omitting to advise the Publishing Office at the time they remit a Post Office Order for the amount of their Subscriptions, and also as a reply to frequent inquiries as to the best means of obtaining THE ARCHITECT in America, the Publisher desires to offer the following suggestions:—*

*To prevent the possibility of delay, and to enable the Post Office Order to be the more readily traced in the event of its miscarriage in transit, it is advisable in all cases to notify per following mail, the number, date, and location of the order.*

### NOTICE TO THE PUBLIC.

*By the Post Office arrangements THE ARCHITECT can now be sent to any part of the United Kingdom by an affixed Halfpenny stamp; hitherto the postage has very frequently been twopence per copy. The Publisher will be happy to forward, for 20s. per annum, post paid, THE ARCHITECT, to residents in towns and neighbourhoods to which there is no easy access by railway. Terms for the half-year, 10s.*

*Our readers are invited to address us on subjects of interest to themselves or the public. We shall be always ready to insert letters asking for a solution of any suitable questions of a professional or practical nature, and to receive replies to such inquiries.*

### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

**SCUNTHORPE.**—Nov. 1.—Plans are required for a Cemetery Chapel, Mortuary, Lodge, Entrance Gates, &c. Messrs. Freer, Hett & Hett, Solicitors, Scunthorpe, Lincolnshire.

### CONTRACTS OPEN.

**ABERDEEN.**—Oct. 27.—For Additions to Commerce Street Public School. Mr. Duncan McMillan, Architect, 4 Dee Street, Aberdeen.

**AYLESBURY.**—Oct. 30.—For Rebuilding Walton Mill Stream Bridge. Mr. W. F. Taylor, County Surveyor, County Hall, Aylesbury.

**BRECKEN.**—Oct. 29.—For Building a Pair of Cottages. Messrs. C. & G. Butcher, Glasbury, R.S.O.

**BLACKPOOL.**—Oct. 29.—For Alterations and Additions to Two Houses. Messrs. Garlick, Park & Sykes, Architects, 6A Talbot Square, Blackpool, and 33 Winckley Square, Preston.

**CAMELFORD.**—Nov. 7.—For Building Police Station. The Police Inspector, Camelford.

**DARRINGTON.**—Oct. 31.—For Building Chapel at Darrington, near Pontefract. Mr. James Wilson, Architect, 12 East Parade, Leeds.

**DARTMOUTH.**—Oct. 31.—For Reseating New Church, St. Petrox. Mr. W. Smith, Solicitor, Dartmouth.

**DAWLISH.**—Nov. 3.—For Enlarging St. Mark's Chapel. Messrs. Hayward & Son, Architects, 50 High Street, Exeter.

**DENBIGH.**—Oct. 27.—For Alterations to Baptist Chapel. Mr. Richard Davies, Architect, Bangor.

**EASTBOURNE.**—Nov. 3.—For Building Town Hall and Municipal Buildings. Mr. C. Tones, Surveyor to the Local Board, Eastbourne. Mr. Tadman Foulkes, Architect, 100 Colmore Row, Birmingham.

**GAMRIE.**—Oct. 27.—For Building Farm House. Mr. George A. Bruce, Architect, Hotel Buildings, Banff.

**GULVAL.**—Oct. 29.—For Building Wesleyan Chapel and Schoolroom. Mr. James Hicks, Architect, Redruth.

**HAMPSTEAD.**—For Buildings in connection with the Workhouse Sick Wards. Mr. Charles Bell, Architect, Dashwood House, 9 New Broad Street, E.C.

**HEMSWORTH.**—Oct. 29.—For Building Hotel with Stable, Coachhouse, Shed, &c. Mr. William Richardson, Architect, 13 Park Square, Leeds.

**HETWOOD.**—Oct. 30.—For Alterations and Additions to Municipal Buildings. Mr. James Diggle, C.E.

**ILKLEY.**—Oct. 31.—For Building Hydropathic Establishment. Mr. William Bakewell, Architect, 38 Park Square, Leeds.

**IRVINE.**—Nov. 17.—For Building Shed and Offices at Irvine Academy. Mr. John Armour, jun., Architect, Irvine.

**KEIGHLEY.**—Nov. 1.—For Building Chapel at Cross Roads. Rev. W. Jackson, Keighley.

**KERACHIA, INDIA.**—Oct. 29.—For Cast-iron Pipes, Valves, Hydrants, &c. Messrs. F. P. Baker & Co., 6 Bond Court, Walbrook.

**LONDON.**—Nov. 30.—For Building Five Blocks of Artisans' Dwellings, Petticoat Square, Middlesex Street. Mr. Henry Blake, Sewers' Office, Guildhall.

**LUTON.**—Oct. 29.—For Building Chimney Shaft at Sewage Works. The Surveyor, Town Hall, Luton.

**MIDLAND RAILWAY.**—Nov. 2.—For Building Gate House near Melton Mowbray. Drawings, &c., at the Engineer's Office, Derby Station.

**NORTH-EASTERN RAILWAY.**—Nov. 14.—For Construction of the Alnwick and Cornhill Branch Line in Two Contracts. Plans at the Engineer-in-Chief's Office, Central Station, Newcastle-on-Tyne.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**PRESTWICK.**—Oct. 29.—For Construction of a Reservoir and Filters, Cutting Tracks, and Laying and Jointing Cast-iron Pipes, and other Works. Messrs. J. & A. Leslie & Reid, C.E., 72A George Street, Edinburgh.

**PUDSEY.**—Oct. 31.—For Building Board Schools at Greenside. Mr. Henry Holtom, Architect, Bond Street, Dewsbury.

**STORNOWAY.**—Nov. 2.—For Construction of Drill Battery, Magazine, Sea Wall, &c. The Director of Works Department, Admiralty, 71 Spring Gardens, S.W.



SWANSEA.—Oct. 30.—For Alterations and Additions to St. Helen's Board School. Mr. E. Sidney Hartland, Clerk to the School Board, 7 Rutland Street, Swansea.

TAPLOW.—Oct. 30.—For Construction of a Swimming Bath, Well, Pumping, and Heating Apparatus, at the Grammar School. Mr. Vardy, Queen Street, Chambers, Maidenhead.

WELLS, NORFOLK.—Nov. 9.—For Building Coast Guard Station. The Director of Works Department, Admiralty, 71 Spring Gardens, S.W.

WEST DERBY.—Oct. 27.—For Erection of Gate Lodge, Outbuildings, &c., at new Cemetery. Mr. F. Bartram Payton, Architect, Laisteridge Road, Bradford.

## TENDERS.

### BLACKBURN.

For Decorating St. Andrew's Church, Livesey. Mr. WM. S. VAILLEY, F.R.I.B.A., Architect, Blackburn.

Cunliffe	£129 0 0
Duerden	125 0 0
Isherwood	125 0 0
Hargreaves	125 0 0
Leaver	121 0 0

### COLCHESTER.

For Building Oil Mills and Coke Factory at the Hythe, Colchester, for Messrs. N. & O. Parry. Messrs. WHITMORE & REEVES, Architects. Quantities by the Architects.

Mason & Son, Haverhill	£4,100 0 0
Southgate & Co., Dulwich	4,100 0 0
Betts, Ross & Co., Clacton	3,959 0 0
Grimwood & Sons, Sudbury	3,888 0 0
Smith, Ipswich	3,777 7 0
Dobson & Sons, Colchester	3,586 0 0
Wood, Chelmsford	3,564 0 0
Lee, Colchester	3,555 0 0
Gibbons, Ipswich	3,494 0 0
Chambers, Colchester	3,470 0 0
Everitt & Sons, Colchester	3,469 0 0
Oldridge, Colchester	3,449 0 0
Diss, Bergholt	3,200 0 0
Eade, Lexden	3,050 0 0

### CROOK.

For Building Goods Warehouse, for the Crook Co-operative Society.

Scorer, Newcastle	£2,347 0 0
Lister, Crook	1,230 0 0
Hare, Crook	1,060 0 0
WALTON, Crook (accepted)	1,050 0 0

### DARLINGTON.

For Building Chapel, Superintendent's House, and Entrance Gates at Cemetery, Bishop Auckland. Mr. J. P. PRITCHETT, Architect, Darlington. Quantities by the Architect.

Bell, mason	£973 14 4
Polard, slater	64 17 8
Blackett, joiner	254 15 11
Wouldhard, plumber and glazier	78 13 4
Willis, painter	31 15 0
Total	£1,403 16 3

### DUNDEE.

For Constructing Intercepting Sewer, &c., in St. Roque's Lane, Dens Brae, and Victoria Road, Dundee.

Thomson Bros.	£309 14 9
Waddell	275 6 10
Cowie	268 1 5
Fairweather & Co.	261 1 11
Will	250 7 3
Anderson	243 4 9
Kinness & Co.	224 7 4
MANN (accepted)	219 2 2

For Supply of 21-inch Cast-iron Pipes for Intercepting Sewer, &c., St. Roque's Lane, Dundee.

Cochrane, Grove & Co.	£186 11 0
Edington & Son	181 11 4
Teasdale Iron and Engine Works	179 18 1
Leidlau & Son	174 18 7
STEWART & Co. (accepted)	174 2 1

For Works in King's Road and Cotton Road, Dundee.

Fairweather	£177 0 10
Anderson	162 16 6
Thomson Bros.	160 15 6
Robertson	151 9 3
Fleming & Son	147 7 3
Peebles	146 18 7
Will	145 3 3
Croll	146 6 3
Mann	141 12 7
Irvine	140 17 1
KINNESS & Co. (accepted)	139 7 3
Cowie	135 9 10

### DURSLEY.

For New Residence in Long Street, Dursley, Gloucestershire, for Mr. Henry A. Wintle. Messrs. BRUNSDEN & HENDERSON, Architects, 3 Barbican, E.C.

Sollick, Dursley	£1,026 3 9
Shorney, Weston-super-Mare	830 0 0
BLOODWORTH, Dursley (accepted)	770 0 0

For Removing Existing Buildings and Erecting New Three-stall Stables, Cart-shed, and Stable Offices for Messrs. Wintle Bros., Long Street, Dursley, Gloucestershire. Messrs. BRUNSDEN & HENDERSON, Architects, 3 Barbican, E.C.

BLOODWORTH (accepted)	£215 0 0
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### DISS.

For Additions to House at Palgrave, near Diss, for Mr. T. G. Smith. Messrs. BOTTLE & OLLEY, Architects, Great Yarmouth.

WHITING & Co. (accepted) . . . . . £450 0 0

### ELMSWELL.

For the Erection of new Manor House, Lodge, &c., at Elmswell, Suffolk, for the Rev. W. A. C. Macfarlane. Mr. J. LLEWELLYN WILSON, Architect, 9 Buckingham Street, Adelphi. Quantities by Mr. John O. Abbott.

Cornish & Gaymer, North Walsham	£4,442 7 0
Ennor, Julian & Co., London	4,370 0 0
Heath, London	3,988 0 0
Dobson, Colchester	3,645 0 0
Everett & Son, Colchester	3,625 0 0

### GREAT YARMOUTH.

For new Premises, Regent Street, Great Yarmouth, for Mr. D. S. Bayfield. Messrs. BOTTLE & OLLEY, Architects, Great Yarmouth.

LEGGETT & COOPER (accepted) . . . . . £1,682 0 0

For new Class-room to St. Peter's Schools, Great Yarmouth. Messrs. BOTTLE & OLLEY, Architects, Great Yarmouth.

LEGGETT (accepted) . . . . . £150 0 0

### GRIMSBY.

For Building Vicarage House for the Parish of St. Andrew, Grimsby.

Willows & Roebuck	£1,910 0 0
Smith	1,900 0 0
Snowdon	1,800 0 0
Nightingale & Danby	1,695 15 6
RIGGALL & HEWINS (accepted)	1,653 0 0

### HEYWOOD.

For Painting Baptist Chapel, Heywood. Mr. J. E. MILLS, Architect, Heywood.

Orford & Coates, Heywood	£198 0 0
Whitworth, Rochdale	114 0 0
Schofield, Heywood	100 0 0
Brook & Whitworth, Rochdale	98 0 0
HOLT, Rochdale (accepted)	95 0 0

### LEICESTER.

For Widening and Deepening the River Soar and the Leicester Navigation, from Braunston Gate Bridge and West Bridge to Roadway Bridge and Railway Lifting Bridge at Messrs. Evans's Mill respectively, including Concrete Towing Path Walls, Flood Arch at Bow Bridge, Covered Outlet under the Midland Railway, Stone Weir 300 feet long, and Works in Connection, for the Corporation of Leicester. Mr. J. GORDON, C.E., Borough Surveyor, Town Hall, Leicester.

Lawson, Glasgow	£40,145 9 7
Benton & Woodiwiss, Derby	34,414 12 2
Kellett & Bentley, London	34,047 11 10
Foster & Barry, Radcliffe, Trent	30,785 0 0
Whittaker Bros., Horsforth, Leeds	30,200 0 0
S. & W. Pattinson, Sleaford	29,162 0 0
PILLING, Manchester (accepted)	27,990 8 0

For Construction of Storm-Water Sewers between Granby Street and Wellington Street, as follows: 21 lineal yards of egg-shaped brick sewer, 2 feet 6 inches by 1 foot 8 inches (4½-inch work); 250 lineal yards of egg-shaped brick sewer, 2 feet 3 inches by 1 foot 6 inches (4½-inch work); 275 lineal yards 15-inch stoneware pipe sewer, 1,895 lineal yards 12-inch stoneware pipe sewer, 215 lineal yards 9-inch stoneware pipe sewer, 544 lineal yards 6-inch stoneware pipe gully drains, together with 1 bell-mouthed junction, 25 circular manholes, 34 lamp-holes, 137 gullies, and works in connection, Leicester. Mr. J. GORDON, C.E., Borough Surveyor.

Stephenson, Market Harboro'	£2,350 0 0
S. & W. Pattinson, Sleaford	1,884 15 2
Smith, Leicester	1,755 11 6
Kellett & Bentley, London	1,752 7 4
Harris, Shrewsbury	1,690 0 0
Smart, Nottingham	1,672 6 10
Roberts, Bradford	1,610 0 0
PALMER, Birmingham (accepted)	1,595 2 8

### LINCOLN.

For Erection of new Works for Messrs. Foster & Co., Engineers, Lincoln.

Morgan	£7,800 0 0
Horton	6,817 0 11
Martin & Sims	6,700 0 0
Cowen & Landsdowne	5,920 0 0
Close & Co.	5,676 0 0
Binns	5,662 0 0
Crosby & Sons	5,546 0 0
W light	5,238 0 0
Harrison	4,919 0 0
Otter & Broughton	4,887 0 0

### LONDON.

For Repairs and Alterations to Premises Nos. 21 and 22 Leadenhall Street, E.C., for Messrs. Goy & Co. Messrs. BRUNSDEN & HENDERSON, Architects, 3 Barbican, E.C.

RICHARDSON BROS. (accepted).

For Alterations to Premises and Erecting New Roof over Yard (Rendle's Glazing), Nos. 2 and 2A Praed Street, Paddington, W., for Messrs. Goy & Co., 21 and 22 Leadenhall Street and Lime Street, E.C. Messrs. BRUNSDEN & HENDERSON, Architects, 3 Barbican, E.C.

Lines & Co.	£159 0 0
Richardson Bros.	148 0 0
SAUNDERS (accepted)	144 6 0

For Alterations, &c., to Hornsey Wood Tavern, Seven Sisters Road, Finsbury Park, N., for Mr. A. C. Duggan. Messrs. BRUNSDEN & HENDERSON, Architects, 3 Barbican, E.C.

Saunders	£165 0 0
Lines & Co.	159 0 0
Richardson Bros.	123 0 0
Clarke Bros.	104 10 0
SMITH (accepted)	99 10 0

### LONDON—continued.

For Further Works at No. 91 London Wall, E.C., for Mr. F. W. Warrington. Messrs. EBBETTS & COBB, Architects, Savoy House, 115 Strand, W.C., and at Colchester.

Steel Bros. . . . . £152 17 6

For Alterations to Nos. 9 and 10 Hazlebourne Gardens, Clapham, for the purpose of Converting the Two Houses into One, and Decorating same. Mr. EDWARD J. THOMAS, A.R.I.B.A., Architect, 79 Mark Lane.

Lupson	£1,270 0 0
Potterton	1,145 0 0
Maxwell Bros.	1,118 0 0
Somerford	1,100 0 0
Cass	995 0 0
PRIESTLEY (accepted)	870 0 0

For the Erection of New Wharf, Warehouse, and Stabling on Bankside, Southwark, for Sir W. A. Rose & Co. Messrs. NOTLEY & TROLLOPE, Architects.

Lathley Bros.	£7,400 0 0
Shaw	7,223 0 0
Patman & Fotheringham	7,191 0 0
Hall, Beddall & Co.	7,120 0 0
Colls & Sons	6,979 0 0
Dove Bros.	6,835 0 0
Conder	6,690 0 0
Ashby Bros.	6,658 0 0
Scott	6,643 0 0
Brass	6,483 0 0

For Additions and Alterations to Premises of the Clapton Park Club and Institute, Homerton.

Hughes	£1,049 0 0
Aldridge & Jenve	1,032 13 0
Nicholls	950 0 0
Thompson & Tweed	920 0 0
List	700 0 0
Stratfield	680 0 0
Upson	625 0 0
GOWER & PETTIPHER (accepted)	452 15 0
Ayres	375 0 0

For Providing and Fixing Fire-extinction Appliances, and Work in Connection, and for Alterations to the Gas and Water Services at the Workhouse and Infirmary, Marlow Road, Kensington. Messrs. A. & E. HARSTON, Architects.

Clark, Bunnett & Co.	£1,871 0 0
Jeakes & Co.	1,795 0 0
Wells & Co.	1,725 0 0
Stidder & Co.	1,016 0 0
Pitt	1,010 0 0
J. & C. Christie	960 0 0
Shand, Mason & Co.	850 0 0
MERRYWEATHER & SON (accepted)	750 0 0

For Erection of Manufactories and Offices, Marsh Hill, Homerton, for Dr. Gildersleeves.

Crabb, Kingsland	£4,900 0 0
Brightmore, North Woolwich	4,825 0 0
Holland, Poplar	4,342 0 0
Lewis, Hackney	4,282 0 0
Olley, Forest Hill	4,184 0 0
Wood, Hackney	4,091 0 0
Larter & Son, Dalston	4,042 0 0
Haworth, Kingsland	3,997 0 0
Wall, Kentish Town	3,990 0 0
Perry & Co., Bow	3,975 0 0
Parfitt, Hackney	3,929 0 0
Foster & Dicksee, Rugby	3,888 0 0
Shurmer, Clapton	3,879 0 0
Hall, Poplar	3,834 0 0
Killingback, Camden Town	3,795 0 0
Bangs, Bow	3,695 0 0
Harper, Hackney	3,572 0 0
Keith Bros.	3,490 0 0
Aldridge & Jenve, Peckham	3,361 0 0
Gibbons, Ipswich	3,000 0 0

For Stabling for 140 Horses, and other Buildings, in Edgware Road, Paddington.

Langridge	£11,970 0 0
Downs	11,580 0 0
Tyerman	11,529 0 0
Woodbridge	10,990 0 0
Lovatt	10,990 0 0
Drew	10,705 0 0
Smith & Son	10,677 0 0
Fish, Prestige & Co.	10,686 0 0
Anley	10,625 0 0
Manley	10,277 0 0
Krauss	10,239 0 0
Allen & Sons	10,133 0 0
Brass	10,093 0 0
Turtle & Appleton	9,986 0 0
Bolding	9,870 0 0
Watson	9,800 0 0
Matthews	9,684 0 0
Hobbs	9,600 0 0
Foster & Dicksee	9,546 0 0
Smith	9,300 0 0

### LONG EATON.

For Construction of Girder Bridge and Approaches over the Erewash Canal, also forming Kerbing, Channelling, and Paving Wiltshire and Sawley Roads, Long Eaton, for the Long Eaton Local Board. Mr. JOHN SHELTON, Engineer, Long Eaton.

Hilton & Son, Birmingham	£3,900 0 0
Tomlinson, Derby	3,428 4 2
TODD (accepted)	3,154 0 0
Engineer's Estimate	3,200 0 0

For the Erection and Completion of New Stabling, Cart Sheds, Store Rooms, Workmen's Cottages and Outbuildings, Sawley Road, Long Eaton, for the Long Eaton Local Board. Mr. JOHN SHELTON, Architect and Surveyor, Market Place, Long Eaton.

Hilton & Son, Birmingham	£825 0 0
Barker, Beeston	745 0 0
Doncaster, Long Eaton	655 0 0
Bull Bros., Long Eaton	645 3 0
Youngman, Long Eaton	645 0 0
Stone, Long Eaton	640 0 0
Bramley-Pepper, Kegworth	610 0 0
Brown, Long Eaton	577 0 0
PERKS, Long Eaton (accepted)	575 15 0
Architect's Estimate	668 0 0



**LONG EATON—continued.**

For the Erection of Fifteen Dwelling-houses, College Road, Long Eaton, for Mr. B. H. Hine, of West Worthing, Sussex. Mr. JOHN SHELTON, Architect and Surveyor, Market Place, Long Eaton.  
STANLEY, Long Eaton (accepted) . . . £1,470 0 0

**MOLD.**

For Building proposed Reading-room and Library at the Market Hall, Mold. Mr. D. WALKER, Architect, Liverpool.  
Hamilton, Altrincham . . . £832 0 0  
Williams, Rhyd . . . 809 4 7  
Beckett, Chester . . . 786 12 10  
J. Roberts, Chester . . . 742 0 0  
R. Roberts, Mold . . . 699 11 1  
T. Roberts, Mold . . . 680 0 0  
The tender of Mr. Richard Roberts, who has the contract for the alterations in the Market Hall, has been accepted, subject to a reduction of £94 in respect of work directly appertaining to the Hall.

**NORTH WALSHAM.**

For new Class-room and Lobby to Board School, North Walsham, Norfolk. Messrs. BOTTLE & OLLEY, Architects, Great Yarmouth.  
Davy, Great Yarmouth . . . £417 0 0  
Cornish & Gaymer, North Walsham . . . 379 0 0  
Easto, North Walsham . . . 307 0 0  
WILSON, North Walsham (accepted) . . . 295 10 0

**NOTTINGHAM.**

For Building Wall of Bulwell Stone in Radford Boulevard, and Works in connection, Nottingham. Mr. BROWN, Borough Surveyor.  
Vanis, Matlock . . . £509 13 10  
Sills, Bulwell . . . 397 13 6  
Toft & Son, Bulwell . . . 389 6 1  
Faoor, Nottingham . . . 365 9 0  
Hodson, Nottingham . . . 365 0 0  
Mculloch, Bulwell . . . 330 0 0  
Holmes, Bulwell . . . 326 0 0  
FOSTER & BARRY, Nottingham (accepted) . . . 323 0 0

**READING.**

For the Erection of New Stores and Making Alterations to present Stores at The Forbury, Reading, for Messrs. E. G. Oakshott & Co. Messrs. BROWN & ALBURY, Architects.  
DENTON (accepted) . . . £547 0 0  
For New Premises, Nos. 122 and 123 Broad Street, Reading, for Messrs. Freeman, Hardy & Willis, Limited. Messrs. BROWN & ALBURY, Architects.  
KINGERLEE (accepted) . . . £1,350 0 0

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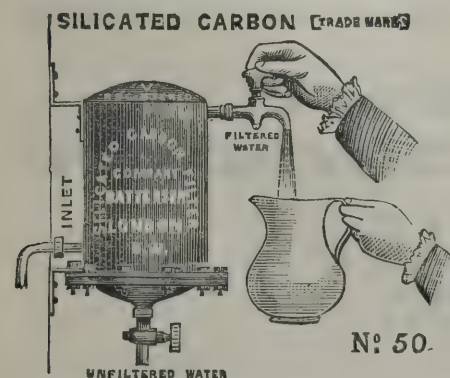
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**READING—continued.**

For New Business Premises, Broad Street, Reading, for Mr. R. Brigham. Messrs. BROWN & ALBURY, Architects.  
Woodroffe & Son . . . £2,367 0 0  
Strong Bros. . . 2,333 0 0  
Wernham . . . 2,266 0 0  
Weaver . . . 2,229 0 0  
Bourton . . . 2,170 0 0  
Kingerlee . . . 2,140 0 0  
Higgs . . . 2,130 0 0  
Boterill . . . 2,096 0 0  
Searle . . . 2,037 0 0  
SIMONDS (accepted) . . . 1,987 0 0

**SOUTH SHIELDS.**

For the Taking Down and Rebuilding of Premises, for Mr. Thomas Smith, King Street, South Shields. Mr. HENRY GRIEVES, Architect, South Shields.  
Fishburn Bros., North Shields . . . £3,448 0 0  
Thompson, Gateshead . . . 3,392 0 0  
Simpson, Newcastle . . . 3,195 8 8  
Crosbie, South Shields . . . 3,178 4 9  
Mathews, South Shields . . . 3,120 11 0  
Laves & Co., South Shields . . . 3,067 15 11  
Miller, Gateshead . . . 3,038 16 4  
Kennedy & Son, Jarrow . . . 3,030 0 0  
Moore, South Shields . . . 2,990 0 0  
Nichol & Sons, South Shields . . . 2,960 0 0  
Storax, Jarrow . . . 2,920 0 0  
Holliday & Christie, South Shields . . . 2,895 14 10  
HUDSON, South Shields (accepted) . . . 2,664 10 7

**STOURBRIDGE.**

For Construction of Main Sewers, Stourbridge Drainage Works. Contract No. 1. Quantities by the Surveyor, Mr. W. FIDDLIAN, Stourbridge.  
Evans Bros., Wolverhampton . . . £11,923 0 0  
Horton, Brierley Hill . . . 9,400 0 0  
Rayner, Bootle . . . 8,756 0 0  
Kellett & Bentley, London . . . 8,050 0 0  
Hill Bros., Beckingham . . . 7,892 0 0  
Vale, Kidderminster . . . 7,800 0 0  
Guest, Stourbridge . . . 7,700 0 0  
Dickson, St. Albans . . . 7,454 0 0  
Hilton & Sons, Birmingham . . . 7,420 0 0  
Palmer, Birmingham . . . 7,098 0 0  
Currall & Lewis, Birmingham . . . 7,071 0 0  
Biggs, Birmingham . . . 7,056 0 0  
Hughes, Gornal, Dudley . . . 6,959 0 0  
Botterill, London . . . 6,799 0 0  
Frayne & Co., Bromsgrove . . . 6,698 0 0  
Law, Kidderminster . . . 5,977 0 0  
JEAVONS, Dudley (accepted) . . . 5,934 0 0

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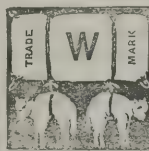
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**SUTTON.**

For the Completion of Two Houses at Sutton, Surrey, for Mr. Skinner. Mr. HERBERT D. APPLETON, The Wool Exchange, E.C., Architect.  
Paine . . . £351 12 0  
Potter . . . 250 0 0  
Woolton . . . 220 0 0

**WOKINGHAM.**

For New Room and Offices adjoining the Drill Hall, Wokingham, for Captain A. F. Walter. Messrs. BROWN & ALBURY, Architects.  
WERNHAM (accepted) . . . £487 10 0

**WOODFORD.**

For Roads and Sewers, Glebe Land Estate, Woodford Green, for Mr. Bradshaw Brown. Mr. J. D. HOOPER, Surveyor, Woodford.  
Cattell . . . £1,331 0 0  
Phillips . . . 1,208 0 0  
Impey . . . 1,183 0 0  
L. Knight . . . 1,169 0 0  
John Jackson . . . 1,150 0 0  
Pound . . . 1,130 0 0  
O. Knight . . . 1,088 0 0  
Roland Bros. . . 1,065 0 0  
Strachan . . . 1,025 0 0  
Wilson . . . 998 0 0  
Nicholls . . . 995 0 0  
Woodham & Fry . . . 979 0 0  
Jesse Jackson . . . 966 0 0  
Barwell . . . 944 0 0  
Adams . . . 898 0 0

**WORKINGTON.**

For Alterations, Market Place, Workington. Messrs. SCOTT & MURRAY, Architects, Victoria Buildings, Workington.

*Accepted Tenders.*  
Douglas & Stuart, joiner . . . £32 17 6  
Wilkinson, mason, plastering, &c. . . 25 0 0  
Sherwood & Armstrong, painting and glazing . . . 6 0 0  
Total . . . £63 17 6

For Alterations and Additions to Houses in Derwent Street, Workington. Messrs. SCOTT & MURRAY Architects.

*Accepted Tenders.*  
Jolley, masonry, slating, and plastering . . . £124 0 0  
Douglas & Stuart, joiner . . . 102 17 2  
Walker, plumbing . . . 33 18 0  
Total . . . £260 15 2

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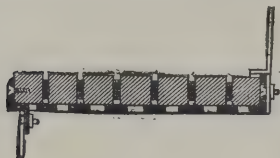
# LINDSAY'S

## IMPROVED PATENT REVERSIBLE TREADS & LANDINGS

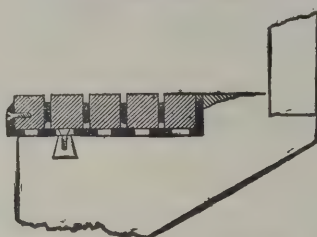
### FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

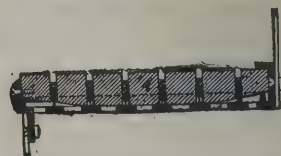
No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## TWO PALACES OF JUSTICE.



we were enabled to publish last week have astonished and delighted our readers to a very considerable degree. The new Palace of Justice in the capital town of Belgium is certainly a striking production; and those, indeed, who may be disposed to describe it as the most striking architectural production of our age, may probably not be easily persuaded to moderate their admiration.

A very short period has elapsed, as no one needs to be reminded, since the Palace of Justice in London was completed; and a comparison between the two buildings thus brought into contrast by such close correspondence of purpose and date can scarcely be avoided. Both are fine academical compositions. Both are monumental in the highest sense of the term. Both are intensely and demonstratively characteristic of the age we live in. And how different they are!

London, in respect of that which constitutes the business of courts of law, is the headquarters of a large empire; whilst Brussels is the focus of a very small one. London has a vast population of its own; it is the seat of enormous wealth, the centre of commercial enterprise dominating the whole world; whilst Brussels is comparatively of little importance either at home or abroad. All this, however, makes it only the more surprising that these two typical artistic manifestations should stand in such an odd relation to each other as they do.

What must first strike the critical fancy is the circumstance that England has gone about her work in a spirit so wholly ungenerous, and Belgium with such lavish magnanimity. It will be a long time before it is forgotten how Mr. AYRTON, occupying the sadly inappropriate office of Minister of Public Works, and Mr. STREET, in at least the equally unaccustomed position of the architect of a large and difficult municipal undertaking, were brought face to face in the direct battle of principle, which both may be said to have loved so well; the one possessed of probably the very meanest ideas of stately building that any man in authority ever could have had, even in Ashantee, and the other actuated by aspirations seldom equalled for force of resolution in the direction of an ideal of art, at once appealing to the most lofty patriotism and defying the most respectable public opinion. The result of this extraordinary conflict of sentiment is before us in the unique edifice in the Strand—unique in this very unusual way, that the longer we are accustomed to its contemplation the more mysterious it will seem to be, as a composition whose motive must be sought for, not in anything like a popular movement, even that of a party, but in the personality of an indomitable spirit at bay, confronting in the person of the First Commissioner a representative of popular movement whom it was a virtue of mere instinct in any artist diametrically to oppose. Thus, it may be said, everything like that afterthought which is so essential for monumental grandeur was prevented. Unlike Sir CHARLES BARRY at Westminster, who added grace to grace and polish to polish during twenty years, till the original design was unrecognisable in the finished work, Mr. STREET seemed to have tied himself down to his first crude proposals as if their improvement would have been an act of sin and shame in the face of such an enemy. BARRY, it is well understood, worked out his Palace of Parliament under a certain sense of reluctance; he would have preferred, in fact, to make it not unlike this very Palace of Justice at Brussels; but he was encouraged by a thousand manifestations of sympathy and approbation, and all Europe delights in the superb quality of his work. STREET, on the contrary, had his soul absorbed in the hard quaintness of his first design; he had no encouragement whatever but that of his own stern artistic con-

science; and perhaps he felt that if he had at all misconceived his task at the beginning the bravest course was to persist in his misconception to the end. There is no sort of disrespect for the memory of perhaps the most powerful artist of the Gothic revival—a Goth *sans peur et sans reproche*—when we thus suggest that the uncompromising and remorseless Gothicism of the London Law Courts will be their chief characteristic and chief merit in future times; but we may be permitted to express the opinion that if the architect had been coaxed and petted by authority, as Sir CHARLES BARRY was, and as M. POELAERT has been, instead of being regarded with continual distrust, we might at any rate have had a more lively building, whereby to diminish in some small measure, instead of increasing, the dreary dulness of the world of law.

But, at any rate, in the unambitious capital of the quiet and prudent *bourgeoisie* of little Belgium, it is well worth while for English people to observe what is done in similar circumstances. We hear nothing of a "Suitors' Fund," consisting of more hundreds of thousands of pounds than the outside community, in whose interest and out of whose pockets the money has somehow come to be accumulated, will ever know; the cash is straightforwardly provided, two-thirds from the national exchequer and the remainder from the resources of the province and the city. The original estimate of outlay was 344,000*l.*, and it has been allowed to run up, certainly somewhat freely we should say, to apparently four or five times as much. Perhaps there may be complaints of extravagance; very likely there are; but, at any rate, no one who has an eye in his head can deny that the commonwealth has got something more than mere houseroom for its money, and something, we doubt not, which is well worth all it costs. If we in England had doubled the cost of our Palace of Justice, the money would have been well spent, and never missed. If the Brussels building costs in the end some two millions sterling, let it be borne in mind that our Houses of Parliament cost three (because a PRINCE CONSORT had the matter in charge instead of an AYRTON), and no one who grudges the money now can get a hearing for his grumbling. We are inclined to think the article which is called extravagant building has never yet been fairly examined by political economists. A monument—some people in England think it is a fine thing to sneer at the phrase, but no matter—a monument like the Brussels Palace of Justice may possibly be pronounced a very paragon of extravagant building; but we are very much mistaken if it does not, in one way or another, pay the Belgian nation better within the next fifty years than the same amount of money spent in almost any other manner, two or three special objects of course excepted. The same sum, that is to say, could easily be frittered away in detail amongst the population at large, so that it might be difficult to trace what had become of it; but concentrate the expenditure upon a single magnificent and magnanimous act of public indulgence like this building, and every household in the land seems to have it for an heirloom of joy and pride.

We do not propose to enter upon any academical comparison of Mr. STREET's work and M. POELAERT's; but, having in view the animadversions which are from time to time delivered against our own great Gothic Palace, we must confess to a feeling of dissatisfaction with many of the details of the great Greek Palace before us. Monumentally considered—and especially when the unusually favourable character of the site is taken into account—the edifice is unquestionably superb. In other words, viewed as a single mass of highly-elaborated architectural composition, its magnificence of purpose is perfect, and the development of its features is calculated in every way to produce the most imposing effect. Its classical repose also is, in the mass, all that could be desired. Each façade is carefully worked out by and for itself; and all seem to harmonise together in the several angular perspectives. The central tower—needlessly, as we think, called a dome—is grandly devised, and singularly novel as well as appropriate. But, with all this, the detail, from beginning to end, is charged to the full with that inconsistency which is the invariable result of ambition too great for the artist, in whatever art. M. POELAERT's Classicism is grand, but clumsy and incoherent. Originality—so difficult in all Greek work—is with him a mere frantic struggle for force, superficial and forcible-feeble. Simplicity, a Classic principle above all others, is wilfully and needlessly outraged on all hands. The rules of scale are everywhere violated. Look, for example (in the principal view), at the great corner



piers, the two-storey Doric order, the one-storey Ionic order, the Corinthian order with half an entablature; at the great windows and small, the great consoles and small, the modillions and no modillions; at the futile pediments on the main cornice, the part blocking course, part attic light and graceful, part prodigiously top-heavy pile of no one knows what over the entrance; and lastly, at the central tower, with its podium, constituting an entirely different and separate structure from all the rest, as if a citadel stood on the summit of a rock within, the last refuge of the lawyers. Compared with authentic Cinquecento work, with French work, with the best German work, and with our own English Classic work when in good hands (even at the present somewhat fantastic moment), all this is unmistakably indicative of a defective sense of art in an accidental official; and the whole world is entitled to express regret that a monument so magnificent in conception and magnanimous in execution should so lamentably fail to answer to the simplest academical criticism. The effect of time will be, of course, to place so large and grand an edifice above rebuke; it becomes an object of pride to the nation and no longer a lesson to the student; but if Belgium cannot produce better architecture than this, we must confess surprise. Our last word, however, need not be one of censure; the *ensemble*, we repeat, is of the greatest splendour, and, in spite of those shortcomings which are natural to all human genius, the name of the architect will go down to posterity as that of a man who has nobly made his mark.

#### AUTUMN EXHIBITIONS.

THE first autumn exhibitions to open have the advantage of appealing to visitors refreshed by summer holidays. People whose eyes had become jaded by the mileage of pictures and objects which overcrowd the London season, return after a month or two among snow peaks or green fields, or from wanderings among foreign towns and townsfolk, with fresh zest and critical faculties rebraced, often, too, with new art experiences gathered in continental galleries.

The French Gallery in Pall Mall, and the exhibition of oils by the Dudley Gallery Art Society, as it styles itself, were opened with a private view last week. Messrs. DOWDESWELL showed a mixed collection, partly of works that have already run the gauntlet of exhibition review, partly of pictures or sketches this year's work. The Fine Art Society had a distinctive little exhibition of drawings and pictures by HABLÖT K. BROWNE—"Phiz," of happy memory—while the set of choice proofs of modern etchings remains on view in their small room. Mr. MACLEAN also opened an interesting collection of English and foreign water-colours.

The show at Messrs. WALLIS'S French Gallery cannot be said to be very brilliant in novelties; in fact, the leading attraction is the *S. Sebastien* by COROT—shown in the Paris International of 1867—a large and impressive picture, but by no means a most favourable example of the master. The foliage of the overshadowing trees lacks the especial grace and delicacy of his touch; the figures, arranged like the group of a Pietà, seem more of an afterthought than the motive of the picture, and are dwarfed by their position at the foot of a high canvas. We find the impression made now by the picture does not affect the notes to this effect taken in Paris sixteen years ago. Perhaps the most interesting piece in the room is the original study for MUNKACZY'S ambitious work, *Christ before Pilate*. The composition tells with greater concentration on the small scale, the *rapprochement* between the Judge and the Accused is felt better, and, although all the chief lines are the same, one feels that they did not bear extension on the enormous surface of the finished picture. In the same way the colour scheme was hardly full enough there, while here in the small study it is simply broad and sombre, effectively lightened by the corresponding whites in the drapery of the Christ and of Pilate. We have heard the great picture called a "leap in the dark," and this original study, clever as it is, indicates that from the commencement there was hardly method enough to carry the artist through so great a venture. Among less known names from foreign *ateliers* is that of D. SKUTETZKY, who has a vivacious picture of a studio incident: an old Italian introduces *The New Model*, a handsome brunette, whose half bashful, half coquettish glance is in pretty concord with the approving look of the artist, turning from his easel to greet

her, and the laughing curiosity of the girls already in possession. The story is told with neat narrative faculty, admirable management of brilliant colour, and a sound, pleasant *technique*. Presumably a Pole by birth is B. KLECZYNSKI, who, under the title *Hunting in Poland*, paints with vigour horses struggling to drag through a snowdrift a sledge laden with sportsmen and hounds. Vivacity is precisely what is wanting to the picture by Mr. BARTLETT of boats on *Return from Lagoon Fishing, Chioggia*. Luminous in atmospheric equality, the far-away objects on the level coast touched in with veracity to the brilliance of Venetian horizons, the figures and boats not ungracefully or very conventionally arranged, one wonders why with such happy features as these the picture as a whole is unsatisfactory. It lacks perhaps the vitality, the spontaneity, which attracted in Mr. BARTLETT'S earlier seen work, when painting in France, and it has not made amends by the perfectly balanced composition, the carefully attuned relations which should result from mature work. Among small interiors, *Bric-à-brac*, by J. BENLIURE, is consummate in setting forth of such a subject as the title indicates, with accompanying figures; nothing could be more sparkling and masterly, even audacious, in play of motley colour and crisp touch. A good specimen of the quiet thoroughness of German *genre*, very complete in character study, and in pathetic sentiment of the kind that hovers between pathos and humour, is the incident picture by A. MÜLLER, a poor professor of music *Parting with an Old Friend*, his violin, as the last resource. Of the couple of large river scenes by CLARA MONTALBA, *H.M.S. Worcester, Nautical Training College, off Greenhithe*, is the best. THEODORE WEBER has a spirited picture of the gale of September last, *The Margaretta Gayser towed into Dover Harbour*, unambitious as compared with much of his work, but clean and true in drawing and tone.

In the Dudley Gallery a few pictures recall the proverbial few grains of wheat in a monstrous amount of chaff. It is something, however, to show a study of *Ocean and Mist*, which is probably the finest thing Mr. WALTER SHAW has yet painted. This artist has gained considerable approbation by the drawing of wave in swell or break on the Academy walls, but he has shown hitherto an inveterate love of chilly contrasts in colour, and a tendency to repeat to monotony an effect of powdery spray and swift-running water. This picture in the Dudley shows close and acute observation of a delicate effect. Over a green expanse of sea, disturbed and heaving from shore to sky, broods a low-lying, soft cloud of mist that colours the further waters with purple shade, through which the white crests sparkle here and there. The air is full of the fine mist, and down below, the white light striking through it on the yellow rocks and thin foam, suffuses both with delicate iridescence. This difficult effect is rendered with a subtle accuracy that is even illusive, while, as the eye passes over the reach of restless water the surface seems to move as one gazes, and one by one the crests seem to twinkle and disappear in the mist. The only fault in the picture is the rock, which, to say truth, is far too much like confectioner's gingerbread. We are the more glad to welcome this work by Mr. SHAW, because we have from time to time given somewhat chilling response to his artistic appeal. From great to small we pass to note a little picture called *A Marshy Coast*, by HILDA MONTALBA, merely lines of brown, sedgy ground, running dark masses with blurred edges between luminous spaces of sky and water, faintly golden with after glow. Perhaps this little bit should be dubbed an "Impression," but it is toned with exquisite sense of light and atmosphere, and moreover impasted carefully as a bit by the "brown masters." Two studies at *Rosenlaui*, Nos. 206 and 239, by M. BERTHOUD, president of the Swiss Academy, are more veracious than interesting. It is a curious thing that no transcripts have less of the real sentiment of Swiss scenery than the works of Swiss artists, perhaps excepting the somewhat conventional art of the famous CALAME, who was trained in the Düsseldorf school.

It is a pity that Mr. ADRIAN STOKES should yield to the prevailing mode of plastering rather than painting; but, although his technical quality has this unpleasant trick, he must be allowed to obtain a distinctly artistic result, and a most singular power of rendering effects of brilliant hot sunshine. *Across the Marshes*, a little upright picture of wet sands and pools of water reflecting the pure blue sky, with red-tiled roofs brightening a horizon of dark buildings, literally glows and flashes with light.

There is not a remarkable figure-picture in the room,



although some of average merit, and one or two which might be noted for unpleasantness. One of Mr. ROOKES' sets of little scriptural designs, painted like a gorgeous missal in richest jewel colours, and with a manner that resembles the work of both a miniaturist and a worker in mosaic, adorns the screen and sets forth with quaint invention the story of *The Apple of Life*, which fruit apparently neither King SOLOMON, the fair Shunamite, nor an Egyptian woman of doubtful morals, desired to retain to prolong their days. The flesh-painting of a nude girl, rosy *After the Bath*, Cairo, by Mr. F. A. BRIDGMAN, must be noted for excellent quality and careful modelling. Amongst miscellanies, the study, *The Pick of the Pack*, by THOMAS BLINKS, is a plucky bit of good draughtsmanship of dogs.

Messrs. DOWDESWELL are wont to invite inspection of series of small water-colours, sometimes intended for engraving. We do not know if such was the origin of a collection of forty little studies on the English coast, announced as a "first series," by Mr. C. ROBERTSON, in what may be called pretty album work. The rough sketches and studies, some thirty, on a larger scale, are far better; one or two, such as the studies of rusted anchors, 63, 70, and 74, are very fresh and crisp. Mr. ROBERTSON, who is sometimes called "Shoes of the Faithful," from a certain well-known picture of his and its *repliche*, appears to have a singularly facile hand, and to attain easily an average of pleasing but not individual art merit. In the same room are grouped thirteen studies by WALTER LANGLEY, some of which have been seen before. Broad, vigorous, vital in rendering of external character, this art of a clever draughtsman and literalist pleases more at first seeing than on continuance. Mr. LANGLEY has been elected a member of the Institute of Water-Colour Painters. He is in youthful prime of years. It will be proved before long whether behind his power of forcible interpretation of fact lies any spring of the higher poetic faculty which makes fact significant and precious. From Venice are sent a couple of architectural sketches, and a study of a girl's head, her shoulders wrapped in a shawl of vivid orange colour, by Mr. W. A. BREAKSPEARE, who is working with Mr. LOGSDAIL, and shows a free emphatic touch, and fine sense of colour.

The loan collection of drawings and pictures by HABLOT BROWNE, at the Fine Art Society's, deserves a closer notice than is compatible with a general exhibition review. Popular as was the art of "Phiz," probably the run of readers to whom his illustrations of DICKENS'S novels enhanced the delights of the tale, and gave realised personality to the actors, yet had not much notion of his rich, inventive faculty and poetic fancy. HABLOT BROWNE had none of the advantages of systematic training, and never sought to mature technical skill as a painter, although he produced water-colour sketches, and even essayed one or two large oil pictures. He was, as it were, born with a certain draughtsman's faculty, as some men certainly are; to transfer to paper the significant lines of the figure, and the suggestive *rappor*t between animate and inanimate nature, came as an easy and natural sequence on the quick mental perception. This spontaneous gift made him so ready and sympathetic an interpreter of other men's thoughts; but nowhere is it more delightful than in his original illustrations. His humour led him up to the verge of caricature, but never beyond it, save, of course, of deliberate purpose. The set of hunting-field incidents lent by Major JAY, 100 to 111, also 33 and 34, might well make Mr. CALDECOT despair, so brimming over with fun are they, so apt in character, so energetic in drawing; the Irish sketches, in slight colour wash, 20 to 25, and the selection from a set in chalk, 191 to 199, lent by Mr. SPOONER, the latter done, with the exception of two, when touring in Ireland with LEVER, show a rich sense of the picturesque and the characteristic with irresistible humour, and one or two, as the *Faction Fight* and *A Wake*, great power in the delineation of passionate action. The genuine pathos of the *Blind Musician*, feebly piping at the gateway of a deserted house, while the stone beasts on the posts seem to sneer derision, shows how much the artist might have done in this way; a way, however, which found expression in very many of the DICKENS'S illustrations. Several graceful designs are scattered about the room, and the design of *Les Trois Vifs et les Trois Morts*, which was elaborated into a large oil picture, and the composition *Sintram following Death into the Dark Valley*, indicate that his imagination thrilled readily to the supernatural. Altogether there is something delightfully genuine about the art; there is humour without vulgarity, and

sentiment without sickliness. If "Phiz" is never so fantastic or so elaborately inventive as CRUIKSHANK, he is never sordid and never prosy.

#### GRAPHIC AND ANALYTIC STATICS.\*

THE first diagram that represented the parallelogram of forces might be said to have anticipated the modern method of computing strains by graphic methods. In the oldest geometry magnitudes are expressed by figures which more or less correspond with them—lines with lines, angles with angles, surfaces with surfaces, and so on. Afterwards the processes which the magnitudes underwent were expressed by algebra. But when in the parallelogram of forces lines were made to express the measure and direction of a series of forces, there was a new idea introduced which seemed almost to combine geometrical expression with algebraic analysis. A long time, however, had to elapse before the idea was developed into the graphic method of arriving at strains which is now very generally adopted, and before long is likely to be universally used. The name of the late Professor CLERK MAXWELL is commonly associated with the extension of the method, but to his credit he acknowledges that there were other investigators who independently arrived at similar conclusions about the applicability of graphic diagrams. After referring to what had been done by RANKINE, he said: "I have since found that the construction of diagrams of forces, in which each force is represented by one line, had been independently discovered by Mr. W. P. TAYLOR, and had been used by him as a practical method of determining the forces acting in frames for several years before I had taught it in King's College or even studied it myself." It is, in a word, to Mr. TAYLOR, a contractor's draughtsman, that we are indebted for the development, as he was the first to prove that the graphic method was something more than an elegant exercise for mathematical students.

Probably Mr. TAYLOR used it as a substitute for the analytic method of ascertaining the effects of a load on a beam. It takes less time, and is easier applied than mathematical calculation. But from this facility in use there is a risk that the graphic method may be employed empirically. The men who are most competent to employ it are those who are practised in the use of the older method of analysis. For this reason we are glad to meet with a book which recognises the fact that one method is the complement of the other, that one is the test of the other, and hence that both may often be applied together in designing the parts of a structure. Mr. GRAHAM'S work is well adapted for use at the drawing-board in offices; but it has also been arranged for class work in colleges and universities. It is a treatise on statics in which the theory of the subject is explained, and examples are given of existing structures. It is of course impossible in the course of an article to give an adequate description of a book of this kind, but a few remarks may have their use.

Mr. GRAHAM begins with an explanation of the principles of reciprocal diagrams, or as they are sometimes called balancing figures. In this part, and indeed throughout the book, he aims at precision of language and at a definite expression of his conclusions. Limits are also set up for the application of the method, in a passage which we extract:—

The criteria by the aid of which it may be decided whether or not any given structure admits of graphic treatment, may be classed under three heads:—

1°. The base figure, on which the science of graphic statics is built up, is the triangle. Now, the sides and angular points of all triangles bear to each other a certain definite relation which can be expressed in the following form:—

$$S = 2p - 3$$

in which formula

S = the number of sides of the triangle.

P = the number of its angular points.

In all figures, however complex, which are subject to graphic treatment, the above relation between the number of sides and nuclei, forming part of the essential framework of the structure, will be found to exist. Many designs, however, in which this relation is non-existent, can be brought under the laws of graphic statics by rejecting certain bars or other elements which do not contribute to the *essential*, but only to the accessory form of the structure. A certain mathematical instinct, or rather a species of intuition acquired only by habit, is necessary to distinguish these cases.

\* *Graphic and Analytic Statics in Theory and Comparison.* By R. H. Graham, C.E. Crosby Lockwood & Co.



2°. Although the triangle constitutes the base of the graphic system, strange to say it is not a figure, which *per se* admits of a reciprocal. This will be at once apparent from the fact that from each apex of a triangle branch only two lines, and since it is impossible that any two lines parallel to these can of themselves form a close figure, the conclusion is forced upon us that for any figure to become directly subject to graphic treatment, *there must radiate from each of its nuclei at least three lines.*

3°. The third condition may be stated to imply the necessity that each line composing the given figure should traverse two nuclei; otherwise the loose end, which did not belong to any pole or nucleus, would *ipso facto* become indeterminate in position; or, in more general terms, the reciprocal line would be indeterminate in length, and therefore could occupy a definite place in the reciprocal figure.

The foregoing criteria suggest the reason why Warren and lattice girders and roof trusses are so often introduced into books on the graphic method. The manner of marking the parts of the diagrams is of as much importance as precision in a geometrical proposition. Mr. R. H. Bow adopted the plan of "assigning a particular letter to each enclosed area or space *in*, and also to each space (enclosed or not) around or bounding the truss, and attaching the same letter to the angle or point of concurrence of lines which represents the area in the diagram of force." This plan is explained by Mr. GRAHAM, but he also adopts another which seems better adapted to intricate diagrams. In the second part the stresses in beams and roofs under various conditions are considered and ascertained by analyses as well as by diagrams. It is shown how results may be tested by taking the trusses separately, and comparing the graphic sum of the component lines with the reciprocal diagram of the frame as a whole. The third part is more abstruse, and, as it deals with couples, moments, gravity, &c., requires a knowledge of mathematics. At the end of the chapters are several examples to be worked out by the student; many of them refer to existing structures, and the answers are given in all cases. This is a novelty in books on graphic statics, and there is no better way of testing progress. Lastly, there is a chapter on wind pressures, derived from papers which have been read at the Institution of Civil Engineers. The diagrams in the volume have been carefully drawn.

#### PARIS NOTES.

THE architectural jury of the Ecole des Beaux-Arts have bestowed the diploma of architect with honours upon the following gentlemen: MM. Albert Berger, Corbineau, Josso, Michelin, Leconte, Montalto, Marcel, Jean B. Maillard, Henri Legrand, Nordet, Redon, and Tondoire.

In the important Jouvain d'Attainville competitions the jury of the Ecole des Beaux-Arts have made the following awards: *Historical painting*.—1st. Prize: M. Bourgonnier, pupil of MM. Cabanel, Millet, and Falguière. Mentions: M. Lambert, pupil of MM. Cabanel, Bin, and Lequien; and M. Trigoulet, pupil of M. Lévy. *Landscape*.—1st Prize: M. Danger, pupil of MM. Gérôme and Millet. Mentions: M. Girardot, pupil of MM. Lehmann and Hébert; and M. Bouvard, pupil of MM. Gérôme, Lefebvre, and Boulanger. The subject for the historical painting was *The Board-room of some great Metallurgical Establishment, showing a lofty carved Chimney-piece, upon which is seen a richly-framed painting of Venus coming to ask Vulcan to make a Suit of Armour for her son Aeneas*. That given for the landscape was *The Repose of the Reapers*. Both prizes are of the value of 2,100 frs., and ten artists took part in each competition, the twenty works being exhibited during the past week at the Ecole des Beaux-Arts on the Quai Malaquais.

At last Saturday's sitting the Académie des Beaux-Arts proceeded to the election of a foreign associated member, in the place of M. J. Felsing, of Darmstadt, lately deceased. On the first ballot M. Paolo Mercury, engraver, of Rome—already a correspondent of the Academy—was elected by twenty-six votes against six given for M. Monteverde, sculptor, of the same city. The Presentation Committee have recommended M. da Silva, the eminent Portuguese architect, to the chair of associated foreign member, left vacant by the death of the Chevalier de Fœrstel. The election will be held on Saturday.

It has unfortunately been found impossible to carry out the proposition, which on the surface appeared so feasible and appropriate, of utilising the ruins and site of the old Cour des Comptes

for the construction of a permanent fine arts exhibition, similar to the South Kensington Museum, under the auspices and control of the Union des Arts Décoratifs. The engineers and architects commissioned to visit and report upon the adaptability of the ruins for the above purpose have unanimously come to an adverse conclusion, and the scheme has accordingly been dropped.

The decorators are now busy upon the frames destined to receive the new mural paintings executed to complete the internal decoration of the Panthéon. Several of these paintings are already finished, and one of the largest, *The Crowning of Charlemagne*, has been exhibited at the National Triennial Salon, which closed on Wednesday last. It is to be placed to the left of the Sainte-Geneviève Chapel, and will thus form a pendant to Cabanel's great work, which covers the whole of one side of the Virgin's Chapel. Two other works are completed by their authors, but in consequence of the dampness of the Panthéon during the winter months, it has been wisely decided not to place them in their positions till May next.

A series of painted glass windows has been placed in the gallery of the Town Council in the Hôtel de Ville. These windows produce a very fine decorative effect, and represent the arms of Paris, and those of many other French cities. Two of them bear the names of all the prefects of the Seine down to and including the last one, M. Oustry.

The sculptor, M. D'Epinay, who is a native of the Mauritius, has received from his countrymen a commission for a group of *Paul and Virginia*, to be set up in the former Ile de France, the scene of Bernardin de Saint-Pierre's charming story.

There is now in course of construction, on the new railway line from Marvejols to Neussargues, a viaduct which, it is claimed by the French press, will be the most stupendous work of the kind ever executed. This *Viaduc de Garraby* will have a total length of 564 mètres, that of the metal superstructure being 448 mètres; the central arch will have a span of 165 mètres, with pitch of 52 mètres, and at its greatest height the top of the bridge will be 124 mètres above the ground. The total weight of the ironwork to be used is 3,200 tons, while the masonry is calculated in the estimate at 20,000 cubic mètres. This splendid work is being executed for the Government by the well-known house of Eiffel & Co., from plans presented to the Government by MM. Boyer & Bauly, State engineers.

#### THE LATE MR. MAPPIN'S PAINTINGS.

THE conditions under which the late Mr. J. Newton Mappin, of Birchlands, Ranmoor, Sheffield, has left his fine collection of paintings to the town of Sheffield, have not yet been disclosed, but it is understood they are such as render it certain that the bequest will be secured to the town. Mr. Mappin has made it a condition that a suitable building shall be erected by the Corporation within five years from the date of his death, and he has left 15,000*l.* for this purpose, but he stipulates that the town shall find the site and also provide the internal fittings, Mr. Mappin's contribution being entirely devoted to the erection of the place. There are also conditions as to the kind of gallery in which the pictures will be displayed, and the Corporation are required to finish the erection to the satisfaction of the executors within the time specified, otherwise the entire collection passes to South Kensington. Mr. Mappin himself estimated his paintings as worth 100,000*l.*, and those who know them best value them at 80,000*l.* at the least. They are insured for a sum of 60,000*l.* Several of the principal works are well known, such as *The Drumhead Court-martial*, *The Sally*, *The Conspirators*, *The Sword and Dagger Fight*, *Hudibras and Ralpho in the Stocks*, all by J. Pettie, R.A. There are also lesser examples by the same artist. John Philips, R.A., is represented by *The Water Drinkers*, and a number of important works. The collection includes works by William Muller, David Roberts, R.A., John Linnell, one of which was painted for Mr. Mappin at a cost of 1,500*l.*; Thomas Sidney Cooper, R.A., B. W. Leader, A.R.A., E. Crofts, A.R.A., T. Faed, R.A. (*Auld Robin Gray*, bought for Mr. Mappin after exhibition at the Royal Academy); W. Q. Orchardson, R.A., a fine figure subject of the historical school, which first brought the artist into notice; Patrick Nasmyth, E. M. Ward, R.A., Branwhite (*The Timber Waggon*), Copley Fielding, John Burr, president of the Society of British Artists, his brother Alexander Burr, Baxter, and Tweedie, portrait painters, James Webbe, Koekkoek, sen., and many others. A noticeable picture is Mr. Frith's *John Knox reproving Queen Mary*. Frederick Goodall, R.A., is represented by four paintings, one of which, *The Halt in the Desert*, was painted by commission for Mr. Mappin at a cost of 1,000 guineas. Of Marcus Stone, R.A., there is a fine example—the cathedral scene from "Much



Ado about Nothing." Another noticeable picture by the same artist represents Napoleon on his way from Waterloo. Mr. Alexander Johnson's *Flora Macdonald's Introduction to Prince Charles* was bought by Mr. Mappin from the artist for 500 guineas, after he had seen it in process of being painted. There are also magnificent examples of Constable, R.A., and Gainsborough, and J. M. W. Turner is represented by *Dunbar Castle*, for which Mr. Mappin paid 1,000 guineas. A large moorland scene by Rosa Bonheur, with dead stag in the foreground, finished by Landseer, cost Mr. Mappin 1,900*l.* His most recent acquisition was a picture in this year's Academy, *When Trumpets Call then Homes are Broken*, by G. Hillyard Swinstead, for which Mr. Mappin paid 1,00*l.* Connoisseurs and artists will be specially interested in a very fine collection of works by Robert Tongue, a painter who died in Egypt twenty-three years ago, and whose pictures are very rare. Mr. Mappin bought his examples from the father of Mr. Edward Hargitt, who was a pupil of Tongue. The chief of these pictures is *The Rainbow*, better known to artists than to the public.

### VENETIAN WELL HEADS.

EVERYBODY who has visited Venice, says Mr. J. C. Robinson, must have taken note of the ornamental well heads which abound on all hands. The famous bronze wells in the courtyard of the Ducal Palace will, of course, be in everyone's recollection; but every piazza, the courtyard of every palace, and, in short, almost every house in Venice, has its "vera di pozzo" of stone or marble, and the collective series forms in itself a veritable school of ornamental sculpture of all ages, from the earliest days of the Republic down to the last century.

These well tops, then, are a notable and distinct local feature, and the term "vera di pozzo," literally "ring of a well," is probably of local application only. They are, in fact, rings, or perforated cylinders of stone or marble, placed over the mouth of the well to fence it in and protect it, and most of them are furnished with flat hinged covers of iron. It is a curious fact that, although the ground on which Venice stands is a mere mud bank, intersected on all hands by a network of salt-water canals, and surrounded by the sea, there is nevertheless an abundance of fresh water at a short distance beneath the surface. The Venetian authorities have at all times paid great attention to the question of the water supply, and innumerable ordinances and regulations have been from age to age formulated respecting these wells.

Like the doorway and chimney-piece of the house, the well top in Venice became a favourite object for sculptresque decoration; it was the fashion, in fact, to have handsome "vere." Some of them are of great size—massive perforated blocks, several tons in weight—and they are often elevated on one or more encircling steps. Some of the earlier types are square or cubical in form, and one of the specimens acquired for South Kensington is of this shape, but the majority are circular or octagonal; the materials are large coarse-grained Greek marble, Istrian limestone, or the red and yellow marbles from the district of Verona. Of these "vere" four specimens have been secured, all of them fine examples of their respective style and date. Two of them were acquired for South Kensington in 1881, and may now be seen placed in the Italian Sculpture Court; the other two were purchased this year for Birmingham. These last are of the largest model—huge blocks of Istrian stone; and one of them is a *chef-d'œuvre*, probably unsurpassed by any other example of its style and period remaining *in situ*.

The earliest in date is the one of cubical shape at South Kensington. This came from the Island of Murano. The ornamentation is purely Byzantine, and the material Greek marble. The date may be as early as the ninth or tenth century, and can scarcely be later than the eleven or twelfth. Byzantine ornamentation soon crystallised, so to speak, into set forms, sometimes repeated for very long periods with but little change. Considerable latitude must therefore be allowed in judging of the date of any particular work of this kind; it is not unlikely, indeed, that favourite types of these "vere" were copied and reproduced for centuries even after their first origination. The ornamentation of this specimen consists mainly of elaborate interlaced work, enclosing on three of the sides square panels, on two of which are different representations of the "labarum," or Christian symbol; the fourth side displays an elegant pattern of linked interlaced circles enclosing stars and wreaths of varied design.

The next in point of date, acquired for Birmingham, is a huge circular "vera," in Istrian stone, of stern and simple Gothic type, somewhat resembling in shape the capital of a massive column; it may, perhaps be referred to *circa* 1350. It came from the courtyard of a house in the *quartiere* or district of San Maurizio, in Venice. Next comes the beautiful octagonal "vera" of the same type, acquired in 1881, and now to be seen in the centre of the Italian Court at South Kensington. This specimen is in Verona marble; the ornamentation consists of an arrangement of acanthus leaves, of an elegant Venetian Gothic character, springing from the lower part, and overwrapping each angle of the octagon, which in the upper part is additionally ornamented by a boldly-carved

lion's head projecting in full relief. On one side is a "stemma," a kite-shaped pavoise shield, bearing the arms of the family to whom the well belonged. Mr. Robinson was not able to ascertain the house from which this specimen was taken, but the arms will doubtless furnish a clue to the original owners. By far the finest of the four remains to be described; this is the other specimen acquired for Birmingham. This is also a "vera" of the largest size, and it is accompanied by its original surrounding steps. It is of Istrian stone, exquisitely wrought in the highest style of Venetian Renaissance art; the date of this piece is probably about 1500. The ornamentation consists of foliated scrollwork in rather low relief, interspersed with birds, fantastic animals, medallions, rosettes, &c.—in short, the richest and most elaborate assortment of the decorative motives of the time, disposed with infinite variety, fancy, and skill. This capital work stood in the courtyard of the ancient Palazzo Molin, and was obtained when, quite recently, the house was pulled down to make way for a modern "casino."

### THE ROMAN OCCUPATION OF BRITAIN.

THE fifth of the present course of Rhind lectures in archæology on the "Roman Occupation of Britain," by the Rev. Dr. J. Collingwood Bruce, commenced with the Vallum of Antoninus, or, as it was generally called in the district that it traversed, Graham's Dyke, the big ditch. Agricola, before leaving the Lowlands of Scotland, found it necessary to place in garrison some troops in his rear, to render all safe behind him. He, of course, could do so most economically by planting his forts in the narrowest part of the country, that which lay between the Firths of Clyde and the Forth. The same reason which influenced Agricola would move Lollius Urbicus to plant his wall there. This general, the representative of the Emperor Antoninus Pius, having dammed back the hostile waves of the Caledonians in the year A.D. 140, thought it necessary to rear a continuous line of defence from the one coast to the other. This he did by carrying a wall from Carriden on the Firth of Forth to West Kilpatrick on the Clyde. It was along the summits of the gentle southern heights that the Antonine wall was carried; and this wall strongly resembled in its general character the great German wall which extended from the Danube to the Rhine—which was an earthen fortification, no masonry whatever being used in its construction. Unhappily for the purpose of the antiquary, Graham's Dyke lay in the district traversed by the lines of communication uniting the two great metropolitan cities of Scotland, and the progress of improvement had done much to obliterate the lines of Lollius Urbicus. It was only here and there that it appeared in its native majesty. In the vicinity of Falkirk, both to the east and west of it, the works were colossal. His (the lecturer's) observation, both on his first visit and one which he paid last summer to the wall, induced him to say, with Gordon, that besides the main rampart to the south of the fosse there was another to the north of it. The northern wall was nearly thirty-seven miles long, and the number of stationary camps placed upon it had been eighteen. From the altars and inscribed slabs which were found in the forts, we learn that various corps of Gauls, Germans, and other foreigners in the Roman service were stationed along the isthmus, besides occasional detachments of the legionary troops. The stations had been placed within the distance of two miles from each other. In the southern wall they averaged four miles, but the southern camps were for the most part larger than those on the northern wall. Barhill Fort seemed to occupy the loftiest position, and from it an extensive view was obtained, the western view being of the utmost importance, for it was needful to have timely notice of the approach of the opposing Scots from Ireland. Lollius Urbicus commanded the Roman forces in Britain during the greater part of the reign of Antoninus, and a stone, which was now in the Museum of Glasgow University, had been found on which his name was carved. Another slab in a perfect state had been found comparatively recently mentioning the name of this famous general, and of his master. Very many of the stones found on the wall did honour to the emperor in whose name and by whose authority it was erected. Having mentioned the inscriptions on some of those stones, the lecturer said the stone of most recent discovery was of peculiar interest. It was large, being 9 feet long and nearly 3 feet broad. It was found at Carriden, the eastern extremity of the wall, and was now in the museum in Edinburgh, and this discovery confirmed the belief that Carriden was the terminus of the wall. The inscription was given in clear, well-formed letters, and was without ligatures, and, in English, it was as follows: "To the Emperor Cæsar Titus Ælius Hadrianus Augustus Pius, the Father of his country. The second legion (the Imperial) constructed the wall through a length of four miles (4,652 paces)." The subjects on either side of the inscription were a battle scene and the performance of a lustration. On the northern wall all the inscriptions, with one exception, represented work done by the three legions then in Britain. On the southern wall there were many inscriptions telling of buildings erected and other work done by Asturians, Batavians, Gauls, and other foreign troops. On the southern wall (Hadrian's) every station and every



mile castle had had a broad gateway opening northwards; on the northern wall the stations seemed to have no northern gates. It would seem as if the northern wall had partaken more of the nature of a barrier against aggression rather than as a line of military operations. The lecturer went on to say that it almost seemed as if the wall of Antoninus was abandoned shortly after the reign of that emperor. The Romans evidently found that the climate of the upper isthmus did not suit them, and for their health's sake they retired to a more genial latitude. Passing to speak of higher themes, the lecturer remarked that an examination of some of the many altars and religious monuments which the Romans had left behind them enabled us to form some opinion respecting their faith and religious practice. They had left abundant evidence to show that they were idolaters; that they worshipped Jupiter, and Mars, and Apollo, and Fortune, and Minerva; that they worshipped the genii which presided over each hearth, each camp, each place; and the nymphs to whom each spring, each fountain, each river was sacred. And eventually, when the rising sun of Christianity rendered it impossible any longer to hold by these vanities, they turned, like some moderns, to the worship of the undefined and mystic thing called nature. Having, in proof of this, described many of the altars, including "dream-altars," which had been discovered, and explained inscriptions, together with the nature of the worship engaged in, and the prevailing superstitions, Dr. Bruce brought his lecture to a close by pointing out that all along the line of the wall of Hadrian they met with traces of Mithraic worship.

In the concluding lecture of the course Dr. Bruce continued his account of Roman relics found in Britain, beginning with some references to their funeral stones. Their burial-grounds, he said, were always outside their cities and camps, and usually by the sides of their roads. In the case of York, the burying-grounds extended for miles along all the roads leading out of the ancient town. In some cases cremation was resorted to; but in many, perhaps in most, the body was returned unburnt to the earth. In the burial of children their toys and ornaments were interred with them; in the case of ladies, rings, armlets, and other cherished objects of taste had been placed in the tombs. The tombstones were invariably dedicated to the *Diis Manibus*. On leaving this life the soul was supposed to assume the position of a minor divinity, to whom offerings, in the shape of funeral feasts, should be offered. It was never said on those stones that the person died; the word "death" never occurred; it would almost seem as if it were a word of evil omen. The formula universally ran that so and so lived so many years, the number of odd months and days being sometimes added. The tombstone often bore the effigy of the deceased, and in the inscriptions there were often found touches of fine feeling, showing that a Roman soldier had a heart under his iron breastplate. One, for example, bore testimony that his wife had lived thirty-three years, *sine ulla macula*, without a stain. It had been remarked that almost all the tombstones were to young persons. Our rough climate had been too much for the natives of southern latitudes. To the question whether there were among the Roman remains any decided intimations of the prevalence of Christianity among them, Dr. Bruce said his answer was that there were no direct evidences, and that there could be none; but that Christianity did prevail to a greater or less extent there was no doubt. Some soldiers in the British legions might have heard the Apostle Paul preach in Rome, and captives from Britain might have heard him too. He doubted not that the seed of the word was faithfully and prayerfully sown by soldiers of Christ who formed part of the Romano-British army. In the absence of positive evidence, he thought they had some negative proofs, which might fairly lead them to think that Christianity had made some way in Britain in Roman times. The principal indication was the occurrence of several altars inscribed *Divis veteribus*, to the old gods. Now, if several altars had been dedicated to the old gods, the conclusion was natural that a new faith had been introduced which had changed the opinions of many; some, however, wished it to be understood that they stuck to Jupiter and Juno, Venus, Mars, and Hercules. Then, again, in the guard-chamber of the north gateway of Borcovicus was found the upper half of a Roman altar, on which could be distinctly made out the letters I. O. M., *Iovi optimo maximo*. Now, if an altar to their chief god had been broken up and used in Roman times as a common building stone, the people of that day had surely found out that an idol was nothing. He had also noticed that many altars had been used as sharpening stones; and an altar to Fortune—a very popular deity—had been turned into a gutter-stone. After referring to other classes of inscribed stones, including the centurial stones, which are very abundant on the southern wall, and are supposed to indicate the portions of that structure erected by such and such centuries of the Roman legions, Dr. Bruce described certain stones bearing sculptured figures. One of these, found at Chesters, on the North Tyne, showed a recumbent figure, supposed to represent the genius of the river. Another had a representation of Cybele, which was a work of considerable merit, the drapery being very fine, and the dress in which the goddess appeared being nearly akin to some of the dresses to be seen in modern drawing-rooms, not even neglecting the arrangements behind. The lecturer next

touched on a class of inscriptions on bronze, which, he said, were documents giving to the persons named in them the right of Roman citizenship, and the privilege of legal matrimony. Of these tablets about sixty had been found throughout the whole Roman world; and of these, four, besides two small fragments of others, had been found in Great Britain. Reference was made to various facts as seeming to show that, for long years before the acknowledged invasion of Britain by the Saxons, they and kindred tribes had been effecting settlements in the island, coming themselves under the influence of the civilisation they found there, and accustoming the native population to their speech. Municipal institutions were well developed under the Romans, and colleges of different classes of workmen were common among them. During the middle ages towns and cities and the trade guilds did much to maintain the liberties of the people, and accustom them to self-government, and doubtless these institutions were but a continuation of those established by the Romans. The architecture of England was greatly indebted to that of Rome. The Saxon and the Norman styles, though each had its own peculiarities, were essentially Roman. The earliest Saxon coinage was a slavish copy of the Roman. Roman law, of course, prevailed in England during the Roman occupation, and it was well known that our common law, particularly the Scotch law, was largely indebted to the Romans for many of its principles and practices. It was curious to notice the influence which the Roman alphabet had upon English literature and that of the world. The prevalence of that alphabet was certainly remarkable, and it was coming more and more into vogue every day. Whilst we could not but bewail the calamities that befell Britain from the departure of the Romans till its settlement under Norman rule, one great advantage resulted: our Continental connection was severed; we were made an independent people; we were taught to rely upon ourselves, and not look to Rome for help. Hence our little isle became the centre of light and liberty and power, rather than the recipient of those blessings from other lands.

### CHESTER CATHEDRAL.

THE Dean of Chester has issued the following circular on the further restoration of his cathedral:—

After a pause of more than six years—during which period, however, some restorative work has always been in progress—it seems reasonable to take courage again, and to hope for the further prosecution of the repair and decoration of Chester Cathedral.

During these years which have elapsed since the general opening of the cathedral on the completion of the restoration of the choir, the following works, besides some minor improvements, have been accomplished: (1) The monuments, which had necessarily been removed during the long process of restoring various parts of the church, have been placed with great care in the positions deemed most suitable. (2) The north side of the chapter-house, which was found to be in a condition of very serious decay, has been made thoroughly strong and secure in its ancient form. (3) The main external roof of the great south transept, which had for some time been in a perilous state, has been replaced by a new roof of the strongest materials. (4) To these things must now be added the disinterment and thorough repair of that Norman crypt on the west of the cloister, the very existence of which was unknown to many, but which is now seen to be one of the most remarkable and precious relics of early times found in the city of Chester. It is satisfactory to add that funds have been received, from various sources, which have sufficed to cover the expense of all these works. The publication of reports in the old form will be resumed this year; and it is hoped that before Midsummer, in the next report, a full statement will be issued of all the money received, with the names of the subscribers, between the close of 1875 and the close of 1882. It is proper, however, to state here in general terms, and with the utmost gratitude, that very large help has been received year by year from His Grace the Duke of Westminster.

Great encouragement is furnished at this moment through the generous gift of 2,000*l.* by Mrs. Platt, for marble mosaics of the best kind on the interior of that north wall of the nave, which has long presented a very dismal appearance. The subjects of these mosaics are to be *Abraham, Moses, David, and Elijah*, with scenes from their lives. A full description will be published at some early opportunity, when this work is further advanced. The hope is now expressed that similar gifts from other donors may follow, so that the projected baptistery, the vaulting of the east aisle of the south transept, and the filling in of the windows of the chapter-house, may be speedily completed. A few words will be permitted separately on each of these three subjects.

The Norman architecture, now for the most part hidden from view, at the western extremity of the north aisle of the nave, is a direct invitation to the construction of a baptistery. The subject has been carefully discussed with Mr. A. W. Blomfield, who is now the cathedral architect, in succession to the late honoured and lamented Sir G. Gilbert Scott: and it does not appear that this



great improvement in the interior of the cathedral, effected in the best manner, need cost more than 1,000*l*. One conspicuous part of the improvement will be the opening out of the whole of the arch now seen in the wall immediately to the north of the western steps of the nave.

The completion of the whole restoration of the south transept will be a great undertaking. But it seems right that it should be directly contemplated now that all the parochial complications of this part of the cathedral church are at an end. A worthy treatment of the south front, including suitable stonework and suitable glass for the large window, cannot be estimated at less than 7,000*l*.: the interior vaulting of the central space of the transept and of the north aisle, with all that is requisite for the cleansing of the walls and repair of the floor, will cost 3,000*l*. more. All, however, that is contemplated to execute immediately is the completion (at a cost of about 700*l*.) of the vaulting of the east aisle, one bay of which was done more than four centuries ago.

Besides the restoration of the north wall of the chapter-house, the glass of one window, of a simple but beautiful design, has been inserted; and another similar window is in preparation. Three others are required. The cost of each of these windows is about 50*l*.; and it is hoped that separately they may be adopted as gifts from special donors. The external roof also ought to be completed, and the cost cannot be estimated at less than 500*l*.

It is proper to add that the roof of the cloisters is in a very bad condition, and that the floor and the drains need careful attention, so that the mischievous effects of damp may be arrested; and it is believed that this can be done without interfering with the picturesque effect of the mouldering mullions. This work (the expense of which would probably be 3,000*l*.) cannot prudently be postponed beyond another year.

This appeal, then, includes a total sum of 15,350*l*. for work which might be spread over three years. For the present, however, all that is sought for is only 1,850*l*., which embraces 700*l*. for the groining of the east aisle of the south transept, 1,000*l*. for the baptistery, and 150*l*. for windows in the chapter-house. Promises of aid will be gratefully received by the Dean, who, as heretofore, will gladly use his best exertions to discharge any trust confided to him by those who desire to promote the dignity and usefulness of Chester Cathedral.

### THE FORTH BRIDGE.

THE following is the second report of inspection by Major-General Hutchinson, R.E., and Major Marindin, R.E., of the works in progress for the construction of the bridge over the Forth:—

Railway Department, Board of Trade,  
August 15, 1883.

Sir,—We have the honour to report for the information of the Board of Trade that, in compliance with the instructions contained in the order of October 26, 1882, and in accordance with the provisions contained in section 6 of the Forth Bridge Railway Act, 1882, we have made our second quarterly inspection of the works in progress for the construction of the bridge over the River Forth at Queensferry.

Both the temporary and permanent works have made good progress since our last report, and their state is now as follows:—

#### Temporary Works.

At South Queensferry—The gas furnaces, hydraulic engines and accumulator, hydraulic bending machine and planing machine for the large plates, two shop engines, shafting, &c., large turning and screwing machine for holding down bolts, one large travelling crane, and one 10-drill machine for the 12-foot tubes are either at work or can be started at a day's notice. Three other large drills and about 200 tons of steel plates are ready for delivery. The temporary stage on the south shore has been advanced to a distance of 1,300 feet, and the inclined approach to this stage and the winding engines for working it have been completed. Several workmen's cottages, a large canteen, reading-room, store, &c., have been erected, and are in use.

At Inchgarvie—The wrought-iron landing stage is nearly finished, a large surface of rock has been levelled as a platform for materials, and a wrought-iron viaduct 250 feet long has been erected to connect Inchgarvie with a detached rock called Craig Sparry, on which are situated the north-east and north-west main Garvie piers.

At North Queensferry—A wrought-iron stage, 95 feet long and 70 feet wide, has been erected over the site of the Fife south-west main pier. This stage carries a traveller, on which are three diamond rock-drills, driven by separate engines for boring the rock, so as to obtain level foundations for the pier. The rock has been levelled round about the Fife main piers to form a platform for storing and manipulating the steel work of the cantilever, and the cottages, workshops, stores, &c., have been completed, and are in use. Eight barges, a steam barge, a steam tug, and steam launch are now in use on the works, and others are about to be delivered.

#### Permanent Work.

At South Queensferry—The concrete foundation of viaduct pier No. 1, averaging 11½ feet in depth, has been completed; at viaduct pier No. 2 the concrete foundation, 5½ feet deep, is complete, and the granite-faced superstructure has been carried up 5 feet; at viaduct pier No. 3 the concrete foundation, 5½ feet deep, is complete, and the superstructure, as above, carried up 8½ feet; at viaduct pier No. 4 the concrete foundation, 3 feet deep, is complete, and the superstructure carried up 14 feet; at viaduct pier No. 5 the concrete foundation, 2½ feet deep, is complete, and the superstructure carried up 6 feet; and at viaduct pier No. 6 (where the foundation is below low-water mark) a coffer-dam is being constructed. A heavy timber dam is also in course of erection at the site of the south cantilever pier, where the depth of water at foundation level is about 20 feet at low water.

At Inchgarvie—The excavation of rock down to the level of low water on the sites of the north-east and north-west piers is well advanced, and a start has been made with the temporary caissons to be used for work below low water.

At North Queensferry—The excavation of rock at the south-west main pier is being proceeded with, diamond drills being employed for boring; the foundation concrete to the north cantilever pier, 2½ feet deep, is finished; at viaduct piers Nos. 10, 11, 12, and 13 the concrete foundations have been completed to the depths of 2½ feet, 2 feet, 8½ feet, and 11½ feet respectively, and the granite-faced superstructure erected thereon to the heights of 7 feet, 3½ feet, 16½ feet, and 24 feet respectively. The excavations for the foundations of the small masonry spans at the north end are in progress.

#### General Remarks.

All the holding-down bolts (576 in number) for the main piers have been delivered; they are from 24 feet to 26 feet long and 2½ inches in diameter, and they have been made (at Landore) of steel stated to have a tensile strength of 30 tons per square inch, and an elongation of 20 per cent. Wrought-iron belting, 18 inches by ¾ inch, has been delivered for looping the Fife piers. The first of the large permanent caissons for the Queensferry main piers, as well as the bulk of the remaining plant required in the shops, is, we are informed, still in progress. The air-compressors for the large caissons are nearly completed and partly delivered, and a large diving-bell for rock excavation below low-water mark is also nearly ready for delivery.

About 40,000 cubic feet of granite have been delivered, of which about 15,000 cubic feet have been set, and about 81,000 cubic feet of concrete are now in position.

The progress and quality of the work, so far as we have had an opportunity of judging on our second quarterly inspection, are in every way satisfactory.

### THE LATE HABLOT K. BROWNE.

IT may not be known generally that the late Hablot Browne was able to draw buildings well, although some of his etchings of old buildings in "Bleak House" and other works suggest the hand of an expert. Canon Venables draws attention to the "Winkles's Cathedrals of England and Wales," in which Mr. Browne's powers as an architectural draughtsman are exhibited in a manner little anticipated by those who know him only or chiefly as an illustrator of Dickens. "Winkles's Cathedrals" was issued in monthly parts; the first two volumes by Mr. Effingham Wilson, during the years 1835–38, followed, after a considerable interval, by a third volume, published by Messrs. Tilt & Bogue in 1842. It was to the first two volumes only that Hablot Browne contributed. The last engraving which bears his name is *A View across the Nave of Norwich Cathedral*, which has date April 1, 1837. Of the twelve cathedrals published up to that date in this series each has several illustrations from his pencil. These are sufficient to prove that if Mr. Browne had devoted himself to this line of art he would have proved himself inferior to none in his power of catching the genius of a building, and accurately reproducing its architectural character without in any way sacrificing its picturesque beauty. His illustrations of that loveliest of all our cathedrals—Wells—may be instanced as an example of his perfect appreciation of quiet beauty and architectural grace. Hablot Browne's sense of the comic appears in some of the groups in the foreground of his cathedral views. For example, the dignified ecclesiastic on horseback, in shovel hat and knee breeches, with his mounted groom behind, reining in his curvetting steed to talk to some rather queerly-dressed ladies, in the engraving of the *East End of Canterbury Cathedral*, and the short fat verger, with his dangling legs, describing the place to a tall, thin, grotesquely-attired stranger in a full-peaked hat, while two workmen sit by smoking their pipes, in the view of the crypt of the same cathedral. In these and other groups we see the germs of the sense of the grotesque which afterwards found its proper field in clothing Dickens's literary creations with pictorial flesh and blood.



## NOTES AND COMMENTS.

MR. WYATT PAPWORTH has issued a pamphlet which will be invaluable to everyone who takes an interest in the history of English architecture. It gives a list of the principal buildings which have been erected in Great Britain between A.D. 1430 and A.D. 1705, and records various events in connection with the progress of Renaissance and Italian architecture in this country. We find laid down, as it were, in it the main points which are most essential for a survey of the style, and the most difficult to ascertain. Simple as they may seem, the forty pages could not have been compiled without years of labour. But why does not Mr. PAPWORTH utilise his materials and undertake an exhaustive history of English Renaissance?

THE Fisheries Exhibition was closed on Wednesday, after several months of almost unprecedented prosperity. In its illustration of the industries allied to fishing the exhibition was complete, and of general interest. But it should not be overlooked, in meting out praise, that to the majority of the visitors the most attractive object in the buildings was the Prince's Pavilion, with its splendid furniture and decorations. A great part of the success of the exhibition therefore belongs to Messrs. GILLOW. In design and workmanship the furniture was not surpassed by anything seen in international exhibitions here or abroad, and it must have exercised a salutary influence on crowds of visitors.

MR. RUSKIN's collection may still be possessed by Sheffield. Hitherto the great difficulty has been the management. Mr. RUSKIN insists on keeping it in his own hands, while the townspeople, who are believers in committees, wish to have a share in the management if they contribute to the expenses. It is now proposed by the mayor that the town should raise a fund wherewith to provide a suitable building for the art treasures, books, and other objects which have been collected or may hereafter be given by Mr. RUSKIN and the St. George's Guild for the museum, the building to be vested in trustees, and to be used for the purpose of the St. George's Museum exclusively. The management, including the selection and arrangement of objects and the custody of the building and its contents, to be in the hands of Mr. RUSKIN and his successors, who will undertake to defray the cost of such management and of keeping up the museum. All objects placed in the museum to become the property of the town of Sheffield for ever, subject, however, to the right of the managers to lend for limited periods from time to time certain of such objects, which shall be specified when handed over to the museum. The proposals seem to be reasonable, but we have yet to know whether they meet with the approval of Mr. RUSKIN, and—his solicitors.

SOMEBODY from Cheltenham rashly invited the Sanitary Institute to hold a congress there in 1884, and, as the prospect was pleasant, the invitation was accepted with becoming coyness. But, unhappily for the gentlemen who take part in the annual excursions from London, the people of Cheltenham are not eager to discuss sewage subjects, and, accordingly, the Institute is open to an offer for next autumn. In the emergency, Dublin has come forth with characteristic hospitality. But it is not easy to say why the Institute should be asked to visit Dublin in preference to any of the numerous societies having offices in London. There has been a congress lately in Glasgow, but, apparently, not the least benefit has been derived by the citizens from all the talking and lunching. The Lord Provost is hopeful that in the remote future something may arise from the visit, and that is all. In other towns, the advantages which were to be derived from the congresses have been no less readily made over to posterity. Yet the illusion continues. No one in Dublin expects that the Liffey will be inodorous after the congress, or that an additional yard of a drain will be constructed. But such is the force of good-nature that speakers are found in Dublin who profess to believe that the Institute "cultivates a taste for sanitary science;" that it teaches what is to be done—which means that it supplies the place of engineers, discovers remedies gratuitously and without the necessity of preparing plans; that it leaves "a residuum of information," and so forth. Now, all this is

absurd; but something like it has to be heard somewhere once a year. Knowing the difficulty of explaining the use of a congress, would it not be well if the very clever committee of the Institute composed a series of pattern speeches which aldermen and other simple-minded philanthropists might repeat on those occasions without becoming ridiculous?

BIRMINGHAM has resolved to possess a memorial of the late JOHN HENRY CHAMBERLAIN, and at a meeting which was held on Wednesday subscriptions amounting to over 1,000*l.* were promised. Many suggestions have been offered as to its form. The mayor is of opinion that a scholarship in connection with the Midland Institute would be the most suitable, while the President of the Board of Trade considers that a room in the Institute Building would be preferable as being a more distinctive memorial. Mr. CHAMBERLAIN's death has called forth expressions of admiration for his character from many notabilities, including Sir FREDERICK LEIGHTON, who wrote from Perugia.

THAT the building trade is not in a flourishing state in Edinburgh is evident from the statistics which were read lately in the Dean of Guild Court. During the year, 381 petitions for leave to build were presented to the Court, of which 353 were passed. Out of that number about one half were for additions and alterations, some being of a trifling character. The year's new work consisted simply of 60 self-contained houses, 63 tenements, 67 workshops and stables, 7 churches or halls, a parcels post office, a bank, and a theatre. This quantity is less than in past years, although the boundaries of the city have been enlarged and the population has increased. The property now unlet in Edinburgh is valued at 82,135*l.* In two years the deficit in the rental has grown to 18,000*l.*

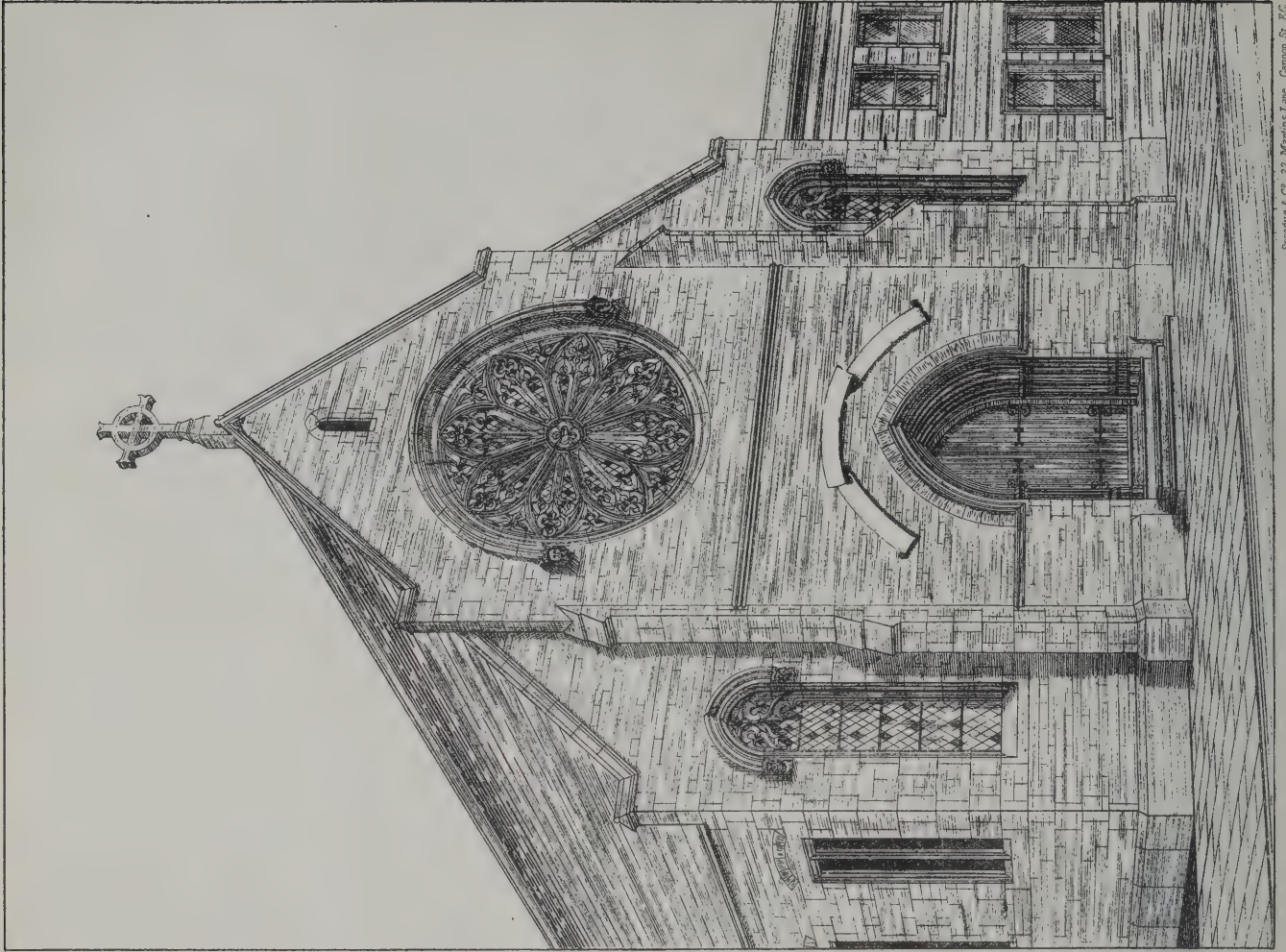
AT a time when so many real and imaginary defects are discussed by sanitarians, it is surprising that no one has called attention to an arrangement that is common in some, if not in all, the public baths of London as well as in provincial towns, and which appears to be a source of danger. It is well known that in them there are second-class and first-class baths; but it is not so well known that the water with which the second-class baths are filled has been used by the first-class bathers. In one public bath in London it is said that water is kept circulating for more than a week before it is allowed to escape. The reason given for this thrift is the cost of water; but when it is found that in London baths pay only sixpence per thousand gallons to the water companies, the fee charged for even a second-class bath might be expected to insure a sufficiency of clean water. There are doctors like the late Sir WILLIAM FERGUSSON, who are sceptical about the risk arising from dirty water, and second-class bathers may escape contagion, but we maintain that it should be made compulsory for the managers of baths to announce the character of the fluid which they supply whenever it differs from pure water.

THE late Mrs. MARGARET SPIER, of Beith, in Ayrshire, some years ago left a large sum of money to erect a school. Certain trustees were nominated, who, according to the deed, were to "found a school in the parish of Beith, and on the lands or farm of Marshalland, and erect the buildings in an ornamental style, to form a suitable monument to the memory of JOHN SPIER, and a memorial of the family of the foundress. The amount to be expended out of the capital fund in the erection of the school buildings, and other conveniences, to be not less than 14,000*l.*, nor exceed 21,000*l.*" This seems a very large sum for a building that is to accommodate twenty-four bursars. But the real object of the foundress was to erect a monumental building, and those who knew Mrs. SPIERS say there was nothing on earth would have moved her from that intention. She had had marble prepared by the late Mr. BRODIE, sculptor, at a cost of between 2,000*l.* and 3,000*l.*, to put into the building. The funds now amount to 41,700*l.*, and the trustees propose to expend 18,000*l.* on the school buildings, and 3,000*l.* on laying out the grounds, if the sanction of the Educational Endowment Commission can be secured.









Spangley & Co. 22, Mark Lane, London E.C.

LECTURE HALL, TROWBRIDGE, WILTS.  
MESSRS WEAVER & ADYE, ARCHITECTS.



VICARAGE PLAN

VICARAGE, SOUTH WRAXALL, WILTS.  
MESSRS WEAVER & ADYE, ARCHITECTS.









RESIDENCE AT CRICKLEWOOD, LONDON.  
EDWARD A. HEFFER, ARCHITECT.













HOSPITAL, GLASGOW.









THE ANDERSON FREE LIBRARY, WOODSIDE, ABERDEEN.

MESSRS PIRIE & CLYNE, ARCHITECTS.















## ILLUSTRATIONS.

## DESIGN FOR GLASGOW SOUTHERN HOSPITAL.

THE design illustrated is one submitted in the recent competition for the new Glasgow Southern Hospital by Mr. JOHN B. WILSON, A.R.I.B.A., Glasgow. The principal difficulties to be overcome in the scheme were the great fall of the site from front to back, and the limited sum available, viz., 20,000*l.*, for 120 beds, with a required administrative department suitable for the future extension to 250 beds. The first was met in this design by adapting the levels of the building to the natural formation of the site, still keeping the different floors on one level throughout, without inclines or steps in passages; the great fall of the ground from south to north allowing the ground floor of male wing to be one flat lower than on female wing, and the male side of the house being three floors in height as against two on female side, gave the proportion required by the instructions between the sexes. This arrangement would have been of peculiar advantage in the working of the extensions when added, as the kitchen level would then be the middle floor level of the new wards; and also the stepping down of the new buildings would allow the morning sun to reach the eastern side of all the wards. The position of the wards on the site is almost due north and south, so as to give all the available sunshine to the long sides of the wards during the entire day, and the arrangement of corridors is such that while ease of administration is attained, any one of the wards could, when required, be totally isolated.

The present accommodation proposed is for seventy-two males and forty-eight females, or 120 in all, the patients having, in the large wards, 1,600 cubic feet, and in the special wards, 2,100 cubic feet, of air each. The future extension is proposed for seventy-eight males and fifty-four females, making a total of 252 patients.

The building was proposed to be of fireproof construction throughout, ward walls finished in KEENE'S cement, floors waxed and polished, and the ventilation, heating, and sanitation to include the most recent improvements. A careful estimate of the cost was made by an experienced Glasgow measurer, and the probable cost certified by him at 19,000*l.* for the building, outhouses, walls, railings, &c., of the present proposed hospital for 120 patients; and the cost of the extension for 132 patients additional, at 10,000*l.*; being a total cost of 29,000*l.*, or 115*l.* per bed.

The drawing illustrated shows the completed hospital.

## BROAD STREET CHAMBERS, READING.

WE publish this week an illustration of premises recently erected at Reading for Mr. G. W. COLEBROOK, from the designs and under the superintendence of Messrs. CHAS. SMITH & SON, architects, of Reading. The building is divided into sections, the ground floor and basement forming a shop and stores, while the upper floors are let off in suites of offices, with a separate entrance and approach. The internal fittings, including staircase, chimneypieces, &c., are of pitch pine. Externally the facing is of red local bricks, with Bath stone dressings. The upper part of pilasters to shop are of blue Purbeck stone, the lower being of polished red granite. Mr. KINGERLEE, builder, of Banbury, has very satisfactorily executed the works.

## RESIDENCE AT CRICKLEWOOD.

THE building of which we give an illustration is taken from a pen-and-ink sketch by the architect, Mr. EDWARD A. HEFFER, of 6 Victoria Road, Kilburn, N.W. The walls are built of deep red brick for facings, with white stone quoins, mullions, &c. The roofs are covered with tiles. The house being of large dimensions, it forms a conspicuous and picturesque feature on "Shoot-up-Hill."

## FREE LIBRARY, WOODSIDE, ABERDEEN.

THIS building was opened on October 15. It was erected at the cost of Sir JOHN ANDERSON. The site is between the Free Church and the Burgh Hall. The building has been designed by Messrs. PIRIE & CLYNE, architects, Aberdeen.

## MISSION HALL, TROWBRIDGE.

THIS building was opened on October 23. It is constructed of stone from the Atworth quarries, with Westwood dressings, the whole being roofed in with slate. The dimensions of the building are: Length, 72 feet; width, 39 feet; height, 50 feet. There are seats for 500 people, but, if required, a larger number can be accommodated. The architects are Messrs. WEAVER & ADYE, of Devizes and Bradford-on-Avon, and the builder, Mr. GEO. MOORE, of Trowbridge. The hall is a gift to the town from Mr. R. RODWAY.

## SOUTH WRAXALL VICARAGE, NEAR BRADFORD-ON-AVON, WILTS.

THIS vicarage is being erected by the Ecclesiastical Commissioners, from the designs of Messrs. WEAVER & ADYE, architects, of Devizes and Bradford, Wilts. It contains a dining-room, drawing-room, study, &c., and eight bedrooms, together with the usual offices. The total cost, including the stables, will be about 2,000*l.* The builder is Mr. JAMES BURGESS, of Westbury, who also restored the parish church last year, under the same architects.

## THE ARCHITECTURAL ASSOCIATION.

THE annual conversazione of the Association was held on Friday evening, the 26th ult., at the rooms of the Royal Institute of Painters in Water Colours, and numerous attended by the members and their friends. The first business was the distribution of prizes won in the previous session.

Mr. COLE A. ADAMS, the president, having taken the chair in the Prince's Hall, he presented the prizes as follows:—

## The Prizes.

*Architectural Travelling Studentship.*—First prize and medal, Mr. J. G. Sankey; second prize, Mr. G. G. Wallace; honourable mention, Mr. G. G. Woodward.

*Architectural Union Company's Prize.*—Second prize, Mr. Hall.

*Class of Design.*—First prize, Mr. G. G. Woodward; second prize, Mr. Brown; honourable mention, Mr. B. Haylor.

*Elementary Class of Design.*—First prize, Mr. W. E. Potts; second prize, Mr. C. C. Bradley; honourable mention, Mr. R. T. Thomson, Mr. H. C. Smart, and Mr. T. H. Roberts.

*Class of Construction.*—First prize, Mr. F. Ward; second prize, Mr. E. P. Tucker; third prize (given by the class), Mr. M. Collins and Mr. B. Potter.

*Class for Study of Planning and Specification Writing.*—First and second prizes, Mr. W. A. Powell and Mr. H. C. Smart, equal.

*Sketch-Book Prize.*—Mr. Sidney Vacher.

*Essay Prize.*—Honourable mention, Mr. E. P. Tucker.

*Lectures on Construction.*—First prize, Mr. A. L. Hart; second prize, Mr. A. O. Breeds; third prize, Mr. R. L. Cole; an additional prize (given by Mr. Blashill), Mr. M. Collins; honourable mention, Mr. H. C. Brushfield, Mr. M. Fawcett, Mr. J. J. Jones, Mr. W. H. Moxon, Mr. J. E. Newberry, Mr. T. H. Roberts, Mr. E. H. Selby, and Mr. E. P. Tucker.

The president then delivered his

## Inaugural Address.

Ladies and Gentlemen,—It is my pleasant duty, as president of the Architectural Association, to bid all the visitors who do us the honour of being present this evening a most hearty welcome; and I would that my duty ended here; but the office of president has its cares as well as its pleasures, and this evening entails upon me the burden of delivering an address, and upon you the listening to it. I shall endeavour to compress what I have to say into as few words as possible, and ask you to deal leniently with me, and to lend not too critical an ear to my discourse.

For the first time, I believe, in the history of the Architectural Association, since that body took up its quarters in No. 9 Conduit Street, we have been compelled, owing to circumstances beyond control, to hold our annual conversazione away from the old quarters, which have for so many years been the home of the Association, and the word "home" strikes a chord in the breasts of us all, and brings back memories of the past, and those who have year after year accepted the invitation to these conversaciones, will perhaps feel a little strange finding themselves in a new abode, away from the old rooms where so many pleasant memories linger, and where year by year the work done during the session has been exhibited, and where you have cheered with enthusiasm the successful candidates as they came up to receive from my predecessors the reward of their labours. What losses, however, we have sustained by leaving the old home are largely compensated for by the increased comfort of the space offered by the hall we are now assembled in, and by the spacious galleries which we have this year placed at our service, offering facilities never before enjoyed for displaying the objects so kindly lent for exhibition, and



also for hanging the various drawings which tell you that our members have not been idle, but have found leisure out of office hours to devote to the study of their profession, and to the winning of the various prizes offered for competition.

I must ask you to bear with me while I attempt to describe the basis upon which we work, the principles which guide us, and the objects we have in view, as I think there must be many here who perhaps until this evening were hardly aware that there existed an institution connected with the pursuit of architecture, and numbering on its roll nearly a thousand members. Briefly, then, the basis upon which we work is a purely voluntary one. Any student, under certain simple conditions, can become a member on payment of a small entrance fee and annual subscription. The income accruing from these sources is devoted to the payment of the necessary expenses of rent, &c., and for providing the prizes yearly offered for competition; and the funds at the disposal of the committee amply suffice to meet the claims, besides leaving a balance on the right side of the account. The principles which guide us are those of self-help and mutual assistance. We have classes for the study of the various branches of our profession, presided over, conducted by, and carried on by the senior members, who, for the most part, retire year by year, and give place to others, who themselves have most probably passed through the classes, and gradually work up through the different grades of office, so in their turn to impart knowledge to their juniors in the classes—the classes themselves electing the officers. The president, vice-presidents, and general committee are elected by the votes of the whole body of the members; and all who take part in the work of the association do so, as I have said, voluntarily and without payment. The immense amount of labour which is entailed upon some of the members would, I think, astonish those who were not aware of the very serious claims this labour of self-sacrifice, for the benefit of others, involves. But I am not here to ask you for your praise and commendation, and I am prevented from doing so by the presence here of so many who have nobly devoted themselves to the advancement of the art they love by giving their services to help on others to serve it, by instilling the principles of art and guiding the footsteps of those who have just entered the profession. There is one exception to this voluntary principle, if it can be called an exception. For two years past two of our senior members have given lectures upon art and construction, with the view of assisting the studies of those who propose presenting themselves as candidates for the honour of election as associates of the Royal Institute of British Architects. The committee, knowing the expense the lecturers must incur, asked them to accept the small surplus resulting from the fees of those attending the lectures, a sum so small as in no adequate way to represent payment for the valuable services rendered by these gentlemen.

The objects of the society are the education of the student of architecture upon the basis and principles which I have only sketched; and to supplement the instructions which he gets in the office where he may be a pupil or assistant. Too often a lad is placed in an office, and there allowed to shift entirely for himself, getting instruction in a kind of haphazard way. He joins the Architectural Association, and there finds an organised system at work, inducements for study, and, if he enters his name on the lists, friendly rivalry and competition. If he has anything in him, he is sure to get on and win his way without fear or favour, and in the struggle with his fellows finds his level, and measures his strength with his antagonists in friendly encounter.

We possess now a really valuable, though not very large library, and owing to the generosity of the Royal Institute of British Architects, their library is, under certain necessary restrictions, at the service of our members.

During Mr. Ernest C. Lee's year of office, he set on foot a subscription list for the purpose of establishing a travelling studentship, and this year I have the pleasure of announcing that all the money we require for this purpose has been subscribed, and without going outside our own body; including a splendid donation of 100*l.* given by the members of the original series of the Architectural Association Sketch Book, no less a sum than 785*l.* has been invested. This evening you have seen the balance of the prize, 20*l.* in all, taken by this year's successful candidate, and the second prize of 5*l.* by a gentleman who ran neck and neck with his rival, leaving a most difficult task for the judges to decide which should take first rank. I must invite your attention to the work done by the travelling student, during his month's tour, on the walls upstairs.

From the brief account I have just given, you will gather that we are at once the most democratic, and at the same time conservative body existing in the great Republic of art, for we cling to tradition, and would feign save what remains to us. We have no patrons; submit to no interference; we make our own laws and abide by them; we live together as peaceable and peace-loving citizens; such honours as we are able to offer are free to all who aspire to hold them, and who will work to gain them. Real talent is always recognised, and services rendered for the common weal ever meet with appreciation and sympathy. Faults doubtless exist amongst us. We might do more, and achieve, doubtless, more solid and lasting good; but you will pardon me if, as advocate, I dilate upon the sunny side of the picture. At another time

and place, later on, it will become again my duty to address the members of our body only, and, may be, point out some black spots upon our sun. To-day, bask only in its rays.

Beyond the advantages briefly touched upon, are those of smoothing down prejudices, enlarging the mind by intercourse with others of like pursuits, measuring strength with strength, and the discovery that others are capable of doing things as well, and perhaps better, than ourselves. Priggishness and conceit must perforce exist; but the student whose failing it may be to show such foibles will soon be made to feel how foolish and ridiculous they are, and will be obliged to find other opportunities outside the walls of Conduit Street for the full enjoyment of his failings. We possess, in many respects, the advantages which a public school gives to the lad brought up in one.

Before I leave this description, I must add that every session we have courses of lectures on various subjects, generally given by the senior members, and by gentlemen outside our own ranks, who kindly come to impart the special knowledge they have to give.

A president's address should, I believe, touch upon those topics and subjects more or less connected with the society or profession he represents. First and foremost then in interest is, perhaps, the great national competition for the new Admiralty and War Office buildings. Since the competition for the Royal Courts of Justice, now rapidly approaching completion, no greater one has taken place in this country than the one I have mentioned. Any architect, no matter of what nationality, may send in a design for these new buildings, and the Government have adopted the plan of asking, in the first instance, for sketch designs, drawn to a small scale, sufficient to illustrate the author's scheme and design. From the designs sent in a limited number will be selected, and the fortunate selected architects will then be invited to send in fresh drawings to a larger scale, with perhaps certain modifications and more in detail. These gentlemen will each receive the sum of 600*l.* for the revised plans, and from the plans sent in one will be chosen and the author asked to carry out the entire work, under certain conditions; the fortunate winner of the prize to receive 25,000*l.* for the entire work, in which the 600*l.* will merge. The designs will be adjudicated upon by a committee, of whom, we are told, one at least shall be an architect. Various opinions exist upon the wisdom and justice of the conditions imposed by the Government. It would serve but little purpose were I to attempt to discuss them here. One may perhaps express a regret that so little value appears to be placed upon the necessity of having the experience, advice, and counsel of professional men among those whose duties it will be to adjudicate upon the designs sent in. If anyone will only glance at the conditions, they cannot fail to see the enormous amount of labour and the great expense the preparation of drawings will involve upon the competitors, and they have, in all fairness, a right to demand that their labours should be judged by those best competent to do so. And who can be better fitted than those whose lives have been devoted to the science and art of architecture? The assistance of officials well versed in the requirements of public buildings is indispensable; but above and beyond all this is the necessity of the possession of those faculties which long experience and study have developed, giving a grasp and perception of a design, and who, looking through it as a whole, can conceive the result likely to follow its erection. The nation will have to pay the bill for these new offices, and has the right to demand that the best judgment which can possibly be brought to bear should, no matter what the cost. Perhaps when we meet together again next year the problem will have been solved, and the design and name of the successful candidate known, as well as those of the few selected for the second competition. Should he, or any of them, come from the ranks of the Architectural Association, great will be the congratulations and rejoicings in consequence. Will the first prize be taken by one who has already won his laurels, and whose work is now before the world, or shall we welcome a new-comer, destined to achieve a mighty success—one whose name shall rank high in our noble art, together with the honoured names whose work and fame are too well known to you to need repeating here?

Curiosity will be keen to know what style will be selected. A few decades back and one might safely venture the opinion that Gothic would win the day; but no one at all observant can fail to have noticed the tendency towards a Classic revival, and the fact that in the public secular buildings recently erected the Gothic style has been conspicuous by its absence. There are many who think that in the Royal Courts of Justice—that monument to the genius of one, perhaps the greatest master the Gothic revival has produced—we have seen the close of the effects of it, and that our restless nineteenth century life clamours for change, change, when so much has been learnt, such great progress made in a style which is ours by right of birth, and which in days gone by was as natural to our forefathers to build in as the clothes they wore and the food they ate. It is the custom with many to sneer at everything modern, and, indifferently acquainted with the art they set themselves up to be judges of, to say that modern Gothic is simply a copy—and a very bad copy according to them—of the old work. Such criticism is, unfortunately, only too popular, and unfortunately there are so many spurious examples of modern



Gothic to hand to support the opinion. But in all fairness, in judging of art go to the best examples, and, observing in order the buildings of modern times—I mean now those erected since the Gothic revival—notice the progress that has been made by such men as Pugin, Scott, Street, Burges, Butterfield, Pearson, Sedding, and other masters, whose names are familiar to you. These men have produced works which will live, despite the criticisms of to-day; ground has been gained, the stamp of genius is upon what they have done. And now, when a school was rising up, taking note of past failures, gaining daily strength in expressing their ideas, and meeting modern requirements in a common sense way, does it not seem a thousand pities that all this ground and experience gained in the adaptation of Gothic, our national birthright, must be surrendered? If, as architects, our enthusiasm has cooled for the style which only a few years ago seized upon nearly every student who entered the profession, and fired his zeal to excel in that and that only, then far better leave it alone, for no good thing could come from the brain of an artist half-hearted in the style he was working in. But one is tempted to ask, What, then, will be the style which shall represent the present school of thought? And echo answers—what? Queen Anne! one whispers, with almost an apology for mentioning the name of that noble lady, who it has so long been the custom to announce as dead; but the fair Queen has had much offered to her name of late, and the “Queen Anne style,” as we call it, for lack of a better name, has much to commend itself in its piquancy, picturesqueness, and adaptability to modern wants, domestic purposes, and to bricks and mortar. But what, it will be asked, are the guiding principles of this style? Has Queen Anne any principles? Is the style capable of rousing enthusiasm in the student, and teaching the eternal lessons of truth and beauty? Are we destined to see a Queen Anne Admiralty and War Office? The event will show; it would be waste of time now to speculate further; only I will add that if by good chance, as some think, and I go with them, this great work of the century should fall into the hands of the man whose work, perhaps, of all men in this country exhibits, despite some eccentricities of genius, the finest perception of what is beautiful—I allude to Norman Shaw—were he to give his whole mind to the design, then, I venture to think, we should have a building which, despite individual objections, would be the work of a consummate artist; a building brimful of piquancy, rich fancy, and masterly grouping, and a work that we should as a nation be proud of. In the hands of such a master, no matter hardly what style he elects to work in, call it Queen Anne or Norman Shaw, we recognise the stamp of power, which bends to its will whatsoever his hands find to do.

Mr. Ruskin tells us, in his book about building, entitled “The Stones of Venice,” that architects should live among mountains. Perhaps we must take this more in its figurative sense; certain it is that, though the migration of the whole profession to mountainous regions would doubtless be a very grateful relief to a certain distinguished barrister, that great Sir Oracle who, when he opes his lips let no dog bark, still it would be attended with very serious inconveniences to the general public and the emigrants themselves. I am afraid that the colony would soon break up from internal dissensions and differences of opinion, and that the great question of a style for the future would not be one whit the more formulated, promulgated, and adopted. The art of architecture in this country is not practised now under defined rules; we have no one great school of thought to which allegiance is given, but it is left free to every man to do what is right in his own eyes. The result is endless variety in our buildings, frequently too much straining after effects too often disappointing in their realisation; and in the constant struggle after so-called originality, perfection in style must, under such a system, be unattainable. We avoid dull monotony; we miss the results which would follow the bent of the best amongst us pursuing the working out of one style. Some critics lay all the faults of modern architecture upon us as architects; but, if anyone is to blame, the public must take their share. Architecture from all time has been the expression of the wants of the people who practised it. The buildings of antiquity tell us sometimes all that is known of the habits of the men who occupied them; and the New Zealander, looking at what he may find, will say that the people of the nineteenth century were evidently a very prolific race, very eccentric in their habits, very erratic in their ways, most multitudinous in their tastes. Any attempt at the classification of buildings and styles he will have to give up in despair; he will find very few houses at all, and he will write it down that the architecture of these extraordinary people was, like their paintings and sculpture, characteristic of the individual artist and of the people he built for, that his works show he had to serve a restless, hurrying world, who demanded so much and paid so little for it.

Is a national style again possible to us? I cannot venture to answer the question, but I may point out that probably the best way to arrive at such a consummation is, I hope, marked out by the step recently taken by the Royal Institute of British Architects. Now entry into that body must be by passing an examination, which means that only those men who come up to a certain test of the knowledge requisite to an architect will be admitted. This, perhaps, is a step towards making architecture, like law and

medicine, a diplomated profession. When one considers the responsibilities thrown upon architects, they have some right to demand that they should be protected against the blame and odium too often showered upon them owing to the utter incompetence—in science and art—of the men who, without any training in the profession, style themselves architects, and cover the land with buildings, inartistic, unscientific, and unsanitary. No qualified man shirks his legitimate share of responsibility; but, willy-nilly, he must suffer for others. If admission into a profession, second to none in the nobility of its aims and character, meant that the applicant must be a man of education and culture, an *esprit de corps* would speedily spring up, art would be studied on better-defined lines, and science would be pursued as the highway to success. I take it that the tendency of this would be greater unity of thought and action amongst us, and the public would have much the same guarantees of competency in the men they employed as they now have in law and physic.

Before, however, we can have good architecture, modern speculative building as usually practised must receive its death-blow. The greater part by far of London is covered with it; somebody is to blame—blame the architects! Ladies and gentlemen, we are *not* to blame; the blame lies with a public which will have it so, with rapacious landlords, greedy lawyers, and poor builders, who, after paying the ground landlord, the lawyers, and estate surveyor's fees, and scamping his work—poor wretch! more sinned against than sinning—runs up house after house under no really efficient control. Sad to say, the street upon street of speculative houses, are more characteristic of our present national style and modern society than anything else we have. All know the miseries, the expense, the disappointment, and, too frequently, the ill-health and death which follow the taking, purchase, and occupation, too often, of the modern builder's house. Bad taste, bad art, bad building, bad plumbing, bad drainage—it all comes back to plain matter of fact. We want too much for the money, and the middlemen want too much money out of the builder. The public are, on the whole, content to let matters be as they are, and offer prices quite inadequate to procure good work. Landlords, lawyers, and surveyors exact too much money from the unfortunate builder, whose only chance of profit is to save every penny he can upon the buildings. Should an equitable law be passed which shall make it easier for a man to procure a freehold plot of ground, so that he may be tempted to build substantially, we may yet see buildings which, though less pretentious, shall be well constructed, and stamped with the character of honesty and durability.

Until this much-to-be-desired epoch in our history comes, it behoves every one of us who have our art at heart to pursue his way, following in the steps of the great architects who have gone before, striving to grasp the lessons they mastered, and ever striving to master the eternal principles of truth and beauty found in the best art, no matter what the style may be. True to ourselves, and so true to all men, and in the pursuit of the beautiful, not to forget that architecture to be beautiful must be strong, and that this expression of strength can only be gained by mastering the sciences of mechanics and construction, the nature of the materials we use, and the requirements which the building must fulfil. We must remember that simply to copy parts from old work, which, however charming they may be where the student has found them, will in all probability look out of place apart from their surroundings and divorced from the spouse they were subservient to, and that we must study to acquire that too often uncommon sense, common sense; stoop to nothing that is mean or dishonourable, and, endeavouring to the utmost of our powers to lead our employers, and not to drive them, try to serve them with loyalty and uprightness, and to hold the scale of justice in even balance between client and builder; and, in a word, take up the motto long ago adopted by the Architectural Association, and “Design with beauty, build in truth.”

On the conclusion of the address, which the president prefaced by craving the indulgence of the company for the breakdown in the management of the cloak-room department, an adjournment was made to the galleries, where the prize drawings were on view, as also a loan collection of furniture, tapestries, and art needlework. Among them were wall-paper decorations and tapestries manufactured by Messrs. Jeffery & Co., from designs by various architects and others, including the names of Mr. J. D. Sedding, Mr. Brightwen Binyon, Mr. W. J. Muckley, Mr. Walter Crane, Miss Kate Faulkner, Mr. F. V. Hart, Mr. J. R. Harris, and the late Mr. B. J. Talbert, the original drawings being shown. Conspicuous in a collection of art metal-work and fittings, for ecclesiastical and secular purposes, by Messrs. Hart, Son & Peard, was the memorial brass executed by the firm for the tomb of Professor E. H. Palmer, Captain J. Gill, R.E., and Lieutenant Harold Charrington, R.N., who were murdered on August 11, 1882. The band of the 2nd Life Guards, conducted by Mr. M. W. Winterbottom, played various selections during the evening, and the evening's entertainment concluded with a concert in the Prince's Hall.



## LEEDS AND YORKSHIRE ARCHITECTURAL SOCIETY.

THE opening meeting of this society was held in the rooms in Albion Street on Monday evening, when the medals and prizes offered through the society were awarded to the successful students. The various drawings prepared in connection with the competition were exhibited in the room. Great interest was taken in the measured drawings of Bolton Percy and Sherburn churches, sent in competition for the society's silver medal. The medal was awarded to Mr. James Hardman. Mr. Todd's and Mr. Burrow's drawings were very excellent in quality, and made the competition very keen. A special prize (a bronze medal) was awarded to Mr. Alfred Whitehead for drawings of Sherburn church, and he also obtained a prize for a drawing of the rood screen at Methley church. Mr. C. E. Tute was the recipient of two prizes, the first being for pencil-sketches of objects of local interest, and the second for a design for a lych-gate. Mr. Joseph Hall was successful in winning a prize for the design of street frontage in Burmantofts faience, and a prize was given to Mr. J. H. Roodhouse for his design for a villa residence. The prizes having been awarded, the opening address was read by the president, Mr. Edward Birchall, F.R.I.B.A. A vote of thanks was proposed by Mr. J. Barlow Fraser, F.R.I.B.A., who at the same time tendered his thanks to the society for their efforts in connection with his return at the head of the poll to a seat on the council of the Royal Institute of British Architects. The vote was seconded by Mr. Thorp and adopted. A vote of thanks was proposed by Mr. G. Corson, and seconded by Mr. G. F. Danby, to Mr. W. H. Thorp, A.R.I.B.A., for his services as past honorary secretary, and as one of the original promoters of the society. The vote was unanimously adopted. The arrangements for the session having been duly announced, the meeting was brought to a close. The president, in his address, said the society would be glad to receive as honorary members, artists, sculptors, and other art workers. After suggesting various ways by which young students might improve themselves in connection with their training in architecture, he gave a general review of the most interesting occurrences of the year. Referring to the rapidly increasing number of telegraphic and telephonic wires which are being carried over buildings, he stated that some underground system should be enforced. Channels might be constructed along the kerbstones, which could also be adapted to other requirements so as to save expense, and the municipal authorities might be remunerated for this use by means of rents.

## THE CHURCH OF ST. MICHAEL, CAPUA.

A PAPER on "A Church by the Camp of Hannibal" appears in the *Guardian* from the pen of Dr. Freeman. Hannibal, the friend of Capua, would at Capua, he writes, honour Diana of Tifata; but it was not Diana that had sent him. With what thanks did he honour his own gods, when Capua, second city of all Italy, welcomed the victor of Trebia, Trasimene, and Cannæ? Is it too bold a flight to fancy the mount of Tifata the scene of the same form of Baal-worship as the mount of Carmel? But the gods of Italy lived on, undisturbed by the momentary presence of Semitic rivals. Diana was not the only power worshipped on Tifata; Jupiter also had his holy place. And it may be that the venerable church which now forms the chief attraction of the hill-side represents the holy place of Jupiter rather than the holy place of Diana. It is curious to see how a kind of appropriateness was often sought after in the nomenclature of pagan temples when turned into Christian churches. Thus, at Athens, the Parthenon remained the Parthenon, while the temple of the warrior Theseus or Heracles became the church of the warrior George. We should look for a Santa Maria, or a Santa Lucia at the least, on the site of the sanctuary of Diana. Had we here a San Pietro, we should have very little doubt in setting down the prince of the Apostles as having supplanted the father of gods and men. But at Sant' Angelo in Formis we feel somewhat less certain; St. Michael suggests the Norman, and the Norman has been there. It may well be that the name is no older than his day. . . . The church and the small surrounding village form a kind of distant *arx* to the greater collection of houses which surrounds the amphitheatre; but among the nearer objects which catch the eye from the height, the most prominent is not old Capua with its amphitheatre, but new Capua (Casilinum that once was), with its towers and cupolas, mediæval and modern. We look on many things from the terrace in front of the portico of the archangel, but that which among artificial objects chiefly draws the eye towards it is not the elder Capua of Hannibal and Marcellus, but the Capua which succeeded Aversa as the seat of the elder but the less famous of the Norman powers in southern Italy. As we mark the advance of national union, no less than as we mark the advance of mere dynastic aggression, we have sometimes to think, for a moment perhaps to mourn, that "kingdoms have shrunk to provinces," though in this form of advance and incorporation, we have no longer to add that "chains clank over sceptred cities."

Capua, on both its sites, once the head of an Etruscan, once of a Norman dominion, passed, in one age, under the universal rule of Rome. In another age it again sank from its separate headship to become a member of that greater Norman dominion in Apulia and Sicily, which, after more shiftings, unions, divisions, transfers to distant rulers, than any other part of Europe, has in our days been merged in the realm of United Italy, with Rome as its head but not its mistress.

We reach then the height which, whether that of Jupiter or Diana of old, is now the height of the warrior archangel. The whole history of the church belongs to the independent days of the second Capua; in its present shape it belongs to the days of independent Norman rule in the second Capua. But the days of independent Norman rule were days when the arts of the earlier rulers of the land still lived on. We see signs of the art of Byzantium, so long mistress of southern Italy, and of the art of the Saracen, in Italy only a visitor or an invader, while in Sicily an abiding master. The portico in front of the church is Roman in its general idea; but, instead of the colonnade and entablature of the Laurentian basilica, we see an arcade whose pointed arches at once call up memories of Sicily. They have indeed little of Sicilian grace. Nowhere at Palermo or Monreale do we see such massive columns bearing such massive stilts. Columns indeed we should hardly say, as some of them are plainly mere fragments. But here, just as in Sicily, just as in Aquitaine, the pointed arch is no sign of coming Gothic; the style is still wholly Romanesque, and somewhat rude Romanesque too. And in this region of Italy we can hardly doubt as to attributing the almost accidental shape of the arches to the influence of Saracen models, perhaps to the workmanship of Saracen craftsmen. Hard by, but not joining the building, by an arrangement unlike Sicily, unlike Apulia, but the common rule of northern Italy, rises a bell-tower, or rather the beginning of a bell-tower, which raises our wonder as to what it would have been if it had ever grown to its full height. Two stages only are finished, the lower of hewn stone, the upper of brick; but their bulk is so great that the tower, if it had ever been finished, would surely have ranked among the highest of its class, utterly overpowering even the great basilica at its side, except so far as it would have been itself overpowered by the natural heights above it. As in some other cases, the thought suggests itself, were not those who left off building the tower wiser than those who began it? The tall bell-towers of Italy look well as they rise from the Lombard plain, as they crown the hill of Fiesole, as they skirt the shores of the lake of Como. But we are not sure that a gigantic tower, which, if it was to have any kind of proportion, ought to have been carried up to a height as great as that of Venice, was in its right place when set a little way up a mountain-side, as if simply to show how small man's biggest works look in the midst of the works of nature. But the technical eye is thankful for the fragment that has been built, though mainly on a very technical ground. Professor Willis is gone, but his happy phrase of "mid-wall" shafts has not died with him. The custom of the elder Romanesque towers, the abiding fashion of Germany and northern Italy, was to set the little columns which divided the coupled windows in the very middle of the wall; the later Norman fashion, whether in Normandy, in England, or in Apulia, was to set them nearly flush with the outer wall. In this tower, Italian by geography, Norman by allegiance, two sides conform to the Italian and two to the Norman fashion. Nothing can show more clearly that even such small matters of detail as the use of a mid-wall shaft were made matters of serious thought, and that it was sometimes thought well to come to a compromise between two rival forms of taste.

The outside of this church, except so far as it forms an object in the general landscape, is perhaps chiefly attractive to the technical observer; the inside will surely appeal to every visitor, though the visitor who is technically informed in matters of painting may possibly look upon it with more of curiosity than of positive admiration. But the eye of the more general inquirer will give something like positive admiration to a basilica of eight arches, resting on ancient columns of various marbles, with its original design far less damaged than is common in Italian churches, and with every inch of available space covered with elaborate paintings of the date of the building. Like St. Peter by Pisa, the archangel by Capua trusted to painting for his enrichment, and not to mosaics; and though the Campanian pictures are by far the better preserved of the two, though nearly all the subjects can be made out with the greatest ease, yet Ravenna and Venice rise to the mind to make us think that at least, if endurance be the object, there is a more excellent way.

The walls of this church form almost a pictorial Bible, with a few legendary and local subjects thrown in. The Abbot Desiderius, holding, after the usual symbolical fashion, the church in his hand, is to be seen at the east end along with the archangels and evangelists. At the west end is what connoisseurs tell us is one of the very earliest pictures of the Last Judgment. On the two sides a crowd of scenes and figures from the Old and New Testament cover the whole space. The style of the painting is said to show Greek workmanship; we look towards the west end and mark, hardly above the ground, a single small shaft with a capital of strictly Byzantine character. The ruling Norman seems on this



spot to have pressed into his service the artistic powers of all the inhabitants of the peninsula. Italian, Greek, Saracen, all give their help to adorn the house of the archangel. The Norman himself contributes nothing but the position of two small columns in the tower windows. We cannot even attribute to him the position of the house of the archangel, set Norman-fashion in a high place; for the first church was built before the Norman came. It is not so further east, where a distinctively Norman element is to be seen in the great churches of Apulia. But the gathering together of the best skill of the time from all quarters is a thoroughly Norman function, whether in Italy or in England.

### THE BLENHEIM MANTEGNA.

THE little tempera painting of *Samson and Delilah* by Mantegna, purchased for the National Gallery, at the sale of the Sunderland Collection, contains a quaint inscription on the trunk of a tree in the background, viz. :—

"FOEMINA DIABOLO TRIBUS ASSIBUS EST MALA PEIOR."

In a description of this picture, published shortly after the sale, it was assumed that the letter P must be supplied before "ASSIBUS" to render the words intelligible, and it was suggested that the deficient letter might be supposed to be round the tree trunk, out of sight. Mr. C. L. Eastlake says that an examination of the picture, which is now hung in the gallery, will hardly tend to confirm this supposition. The Latin word *as* was used idiomatically to denote various measures of extent and capacity, besides those of weight and pecuniary value, and therefore "tribus assibus," in this instance, seems to make quite as good sense as "tribus passibus." Indeed, the English expression "three times as bad," signifying not repetition, but intensity, is a parallel idiom. Moreover, the line, evidently intended for an hexameter, despite the false quantity of the I in DIABOLUS, will "scan" as it is written without the elision of the final S in "TRIBUS," which would be necessary to the metre if the P were inserted before the following word. But whether we construe it "A wicked woman is thrice as bad as the Devil," or "by three degrees worse than the Devil," the meaning of the author is equally plain.

### IRISH BUILDING MATERIALS.

THE following are the awards of Messrs. R. Walker and P. Barry and Professor Jaek on the building materials shown in the Cork Exhibition: Wm. Beecher, D.L., freestone from Cape Clear as building stone, hon. mention. C. P. Coote, D.L., limestone suitable for engineering works, hon. mention. R. Collis, specimens of Irish marbles, hon. mention. Cooper & Co., Drinagh, Wexford, for slow-setting cement, ground extremely fine, giving considerable strength under tension, and in concrete slab provided by the company, the manufacture of which is excellent, hon. mention. Thompson Brothers, Cork, Vectis Portland cement for quick-setting cement, finely ground, hon. mention. The Ferrumite Manufacturing Company, Cork, ferrumite as a building material, and especially in slabs for flooring, medal. Benduff and Froe Slate Company, Rosscarbery, county Cork, medal. Victoria Slate Company, Dublin and Carrick-on-Suir, strength, grain, texture, and colour, medal. Wm. Carroll, Cork, for limestone for building purposes and for lime, hon. mention. Healy Brothers, Tralee, large limestone (tomb) monument, for excellence of workmanship and sound material, in cut and moulded limestone, medal. Francis Ritchie & Sons, Belfast, for stone suitable for building purposes, hon. mention. Jas. Fitzgerald, Cloyne, county Cork, for general collection, medal. Rev. Canon Brosnan, P.P., V.G., Caherciveen, county Kerry, Castleisland marble and red limestone, hon. mention. Burns & Hutton, Belfvelly Brickworks, Queenstown, for bricks and tiles, medal. South Wales building and fire-bricks, hon. mention. Fleming & Co., Tourig pottery, Youghal, bricks and tiles, hon. mention. E. O'Shea, Callan, Kilkenny, Celtic cross, after the design of the ancient Irish cross, Kilkis Green, county Kilkenny, for excellence in workmanship, medal. Collection of raw materials, committee of exhibition; sample No. 4, duplicate of building stones of Ireland (146 specimens), collected for the Museum of Irish Industry in 1845-46 by the Royal Engineers, contributed by the Royal College of Science, Dublin (Science and Art Department, South Kensington). We consider the executive committee is indebted to the College of Science, Dublin, for their kindness in contributing those most interesting specimens of Irish building stones. Same stand—Mr. C. S. Parnell, M.P., Avondale, Rathdrum (W. Kerr, agent), specimens crossing channels and pavements, hon. mention.

#### Jurors' Report.

We beg to thank Messrs. Lambkin Brothers for their kindness in placing one of their powerful hydraulic presses at our disposal for conducting tests. We have had much pleasure in observing the general excellence of the majority of the exhibits. The building stones indicate that there is a considerable variety throughout

Ireland suitable for all classes of work in architecture and engineering, for ornament and plain work in small dimensions or in large blocks. The colour of the limestone throughout the country varies from dark grey to bright light grey. Both kinds are often of crystalline texture—even grain, with two or three "freeways"—and capable of being worked to the slenderest proportions in mouldings, tracery, or enrichments, while other specimens of both light and dark colour show a considerable amount of lamination, and can only be laid on their quarry bed without risk. Messrs. Healy Brothers' monument and Mr. O'Shea's Celtic cross are excellently tooled. Mr. Fitzgerald's collection is very good, and the beautiful colour of the southern limestone is seen to advantage in his Celtic cross. The sandstones are especially worthy of comment, and need only to be introduced into the market to insure their being used in building operations. The marbles throughout the country are abundant and of endless variety in colour. Galway and Cork are very fruitful in marbles. The red limestone of Cork is well represented. The specimens of lime are good, but all are not well burned. Care in this respect is necessary to insure the best results in mortar. We are pleased to see an Irish manufacturer taking a good position by the side of a well-established house in cement, an article of varied utility and large consumption. The Drinagh cement, judged as a slow-setting cement, bore the tests with excellent results; and there is no reason why it should not ultimately rank in the market with the best brands of this kind of cement. The testing of the bricks showed very good results, especially the Belfvelly and Youghal. More care in washing the clay in the latter and in moulding the clamp or common brick sticks would show further improvement, and leave nothing to be desired in point of strength and durability.

### THE SOUTH WALES UNIVERSITY COLLEGE.

GREAT activity has prevailed in Cardiff since that town was selected by the Government arbitrators as the site for the college, to keep in accord with undertakings then made, that the college should be in working order by October 1883. An arrangement first made to start the work in the new science and art schools was not sanctioned by the Science and Art Department, and the council of the college have acquired, at a rental, the use of the building hitherto known as the Glamorgan and Monmouthshire Infirmary, which they instructed Messrs. James, Seward & Thomas, of Cardiff, to alter and renovate for college purposes, a new infirmary being on the point of completion, from the designs of the above-named architects. Although a month only was given to the work at the college, it was satisfactorily completed by October 24, on which day it was opened with some ceremony by Lord Aberdare, the first president—a practical key of solid gold, manufactured by Messrs. Chubb & Son, from the design of Mr. Edwin Seward, R.C.A., being used on the occasion.

On the same day the new Cardiff Public Hall, erected from the designs of Messrs. James, Seward & Thomas, was opened by Mr. Edward Jenkins, in time for the inaugural ceremony to be held therein. About three thousand persons were present, including Lord Aberdare, Lord Carlingford, Mr. Henry Richard, M.P., Mr. Lewis Morris, and many of the leading names connected with the movement of higher education in Wales.

The disused infirmary buildings are found to give excellent accommodation both as to space and arrangements for the new college work, and the erection of a new college is thus deferred for several years.

### INTERNATIONAL FORESTRY EXHIBITION.

THE proposed International Forestry Exhibition, which will be held at Edinburgh in the summer of next year, promises to be a great success. The exhibition will be arranged in ten classes, namely: (1) Practical forestry; (2) forest produce, raw and manufactured; (3) scientific forestry; (4) ornamental forestry; (5) illustrations of forestry; (6) forest literature and history; (7) essays and reports; (8) loan collections; (9) economic condition of foresters and woodmen; and (10) miscellaneous. The regulations state that the exhibition is intended to include everything connected with or illustrative of the forest products of the world, and that it will be open to exhibitors from all countries; that the entries will close on March 1, 1884, and that exhibitors will be charged one shilling per square foot of floor space. Arrangements will be made by the committee for the reception of exhibits at a date to be fixed, but all fulminating and explosive substances, and all dangerous materials, will be absolutely forbidden to be sent. Medals, money prizes, and diplomas for exhibits and essays will be awarded by competent jurors. Contributors to the loan department are requested to communicate with the secretary, Mr. G. Cadell, 3 George IV. Bridge, Edinburgh, who will supply special forms to be filled up. The committee, it is further stated, will endeavour to obtain from the various British railway companies special terms for the conveyance of exhibits to and from the exhibition, and such arrangements as are made will be duly intimated to exhibitors.



## THE OLD GLASGOW COLLEGE.

A LETTER has appeared from Mr. A. G. Thomson, architect, advocating the removal and re-erection of the remains of the old University Building in Glasgow. Glasgow, for a city of such great antiquity and importance is, he says, by no means rich in ancient monuments. The cathedral is, admittedly, a matchless example of the ecclesiastical architecture of the middle ages; but in the matter of secular buildings of the olden time we are not so fortunate. One remnant, indeed, exists in the picturesque and impressive façade of the old university in High Street, dating as far back as the commencement of the seventeenth century, and it would be well if public interest were awakened to the necessity of steps being taken for its conservation. The railway company has, on more than one occasion, been urged by the city authorities to carry out the widening of High Street in front of the College Station; but this public improvement, desirable though it may be, would involve the demolition of the street frontage. The company would, in all likelihood, be willing to meet the wishes of the community in the disposal of the materials. On this assumption Mr. Thomson would suggest that the chief decorative members of the ancient stonework should be embodied in the construction of a principal gatehouse or lodge at one of the entrances to the grounds of the new university, say the north-western entrance, opposite Hillhead Street, which is still unprovided with permanent buildings. An inscription should here record the circumstance of the escutcheon (which bears the date of 1658) and principal architectural details having formed part of the original edifice. As a successful instance of adaptation of the same nature, Mr. Thomson refers to the fine old staircase which formerly stood in the quadrangle in High Street, and has been re-erected at the west end of the new university.

## SANITARY INSTITUTE OF GREAT BRITAIN.

A PUBLIC meeting of the local committee and the subscribers to expenses fund, in connection with the recent Sanitary Congress, was held in the Council Chambers, Glasgow, on Monday. The Lord Provost presided.

Mr. Henry Johnston, the local secretary, read the report of the committee, which stated that the recent congress was one of the most successful that had been held in connection with the institute, and that the arrangements made for the reception of the institute were equal to the occasion. For that satisfactory result they were indebted to the citizens of Glasgow. The total amount subscribed was 1,266*l.* *os.* *9d.*, and there was a balance of about 500*l.*; and as the fund was raised in the form of a guarantee, the committee recommended that the balance be returned *pro rata* to the subscribers, that 10*l.* be retained to meet any charges that might have been overlooked, and at the expiry of two months the balance, if any, be equally divided between the Royal and Western Infirmaries. As to the exhibition, during the time it had been opened it had been visited by about 25,000 people, and was one of the most successful ever held by the institute. The report concluded by expressing the acknowledgments of the committee to the directors of the Royal Exchange and the Athenæum for throwing these institutions open free to the members of the institute while in Glasgow.

The Lord Provost, in moving the adoption of the report, said there was one part which was of a very satisfactory nature, and that was the financial. It was extremely satisfactory that the citizens, with their usual liberality, had come forward on this occasion to such an extent that the committee were now able to return to them so much as about 40 per cent. of what was given. That, he thought, would have a wholesome effect in the future when any such necessity arose to aid a useful scheme. As regarded the usefulness of the congress to the citizens, he dared say they were not able at this moment to gauge its importance. He was hopeful, however, that it would show fruit in future years. The only other matter in connection with the congress was that the arrangements were of a character to take away from the discussions that ensued after the reading of the papers many of the eminent men from the south. Some six or eight gentlemen were engaged nearly all the time examining the products that were sent for exhibition, and making their awards. It would have been a matter of great consequence if they had had the advantage of their presence at the discussions that took place in the St. Andrew's Halls, because he believed they would have thrown an amount of light on some of the questions that were brought up that really was not thrown upon them by those who were present. Whatever might be the arrangements in future years, he hoped that in the meetings of the Congress in London some of the subjects introduced in Glasgow would be taken up and ventilated, so that the public might have the opinion of these men upon them. To his own mind—and he hoped to the minds of those present also—the visit of the Sanitary Institute of Great Britain to Glasgow had been a successful one, and, looked at in any way they pleased, it must be of great service to the city.

Bailie Wilson seconded the motion. He congratulated the city upon the success which had attended the Congress in all its

departments, and expressed the hope that the city would reap the benefit in future years. A letter had just been received from Mr. Wallis, the secretary of the institute, in which that gentleman said: "I am desired by the chairman, on behalf of the council, to express to you the great gratification they feel at the success of their Congress meetings at Glasgow, and they would desire heartily to thank the Lord Provost, the local committee, and all those by whom the arrangements for the Congress were so carefully made and successfully carried out. They trust that the Congress will prove an interesting point in the sanitary annals of Glasgow, and that its results may prove a lasting benefit to the town itself, and also to the general advance of the objects which the Sanitary Institute has so much at heart."

The motion was unanimously agreed to.

On the motion of Mr. Wyllie, seconded by Archbishop Eyre, a vote of thanks was awarded to the executive committee, which was acknowledged by Bailie Hamilton. On the motion of Mr. John M'Laren, a vote of thanks was awarded to the Lord Provost. Bailie Wilson acknowledged the vote on the part of the Lord Provost, and the meeting then separated.



## The late Mr. Street and Sir Edmund Beckett.

SIR,—It is as well, perhaps, that the *Times* has closed its columns to a correspondence which it took care to make as one-sided as possible; but it does not seem right that Sir Edmund Beckett should be left wholly unanswered.

His reckless misstatements cannot be substantiated, as he seems characteristically to think, by simple reassertion, still less by fresh fabrications and darkly-hinted innuendo—his favourite weapon. With what ease and force that weapon might be turned against himself all who know anything of his career must be well aware; but so long as he confines himself to butting at the living his attacks are best met with silence. Architects can well afford to contemplate with calmness the familiar spectacle of the voluble (if somewhat slipshod) baronet running amuck. He has done it before, and he will do it again when the fit takes him. Like the hen-pecked navvy, we are happy in the knowledge that, while it amuses him (and the public), it does not hurt us; and we may feel well assured that, after his wildest onslaught, all people of ordinary common sense will continue to think the profession of architecture neither worse nor better than any other. When, however, not content with attacking the living, he goes on to misrepresent and abuse one who can no longer defend himself, but whose name will doubtless be held in honour long after Sir Edmund Beckett's is buried in oblivion, I am sure that not only every architect, but every man of decent feeling, must be ready to protest against such a system of warfare.

October 31, 1883.

Yours obediently,  
ARTHUR W. BLOMFIELD.

## Exhibition of Works in Wood, 1884.

SIR,—I shall be glad to be permitted to draw your readers attention to an intended Exhibition of Works of Carpentry and Joinery, which is to be held in Carpenters' Hall next summer, under the direction of the Carpenters' Company and the Joiners' Company of the City of London. These companies, acting in concert, have arranged a series of prizes for models and specimens, and others for drawings of carpentry and joinery, which are announced more in the hope that during the winter persons interested in these arts may prepare specimens of their skill. Full particulars of these competitions can be had by applying to the clerk to the Carpenters' Company, Carpenters' Hall, London Wall, E.C.

It is in addition proposed to form a museum of every sort of illustration of both arts. Drawings, models, photographs, specimens of such subjects as roofs, timber spires, half-timber construction, the stall-work or tabernacle-work of churches, or household joinery will all be welcome, and it is to be hoped that many of your readers may be willing and able to place such objects at the disposal of the companies, who are very well situated both for space for exhibition purposes and for the aid of men familiar with the practice of both arts on the courts of the two companies.

Yours obediently,  
T. ROGER SMITH.

## The Dublin Museum Competition.

SIR,—A paragraphist in "Notes and Comments," whose hand may be recognised as having been at this subject before, is, allow me to say, just as ill-informed about it as in former instances, and has as little justification for an unfair fling at "Dublin architects." The Dublin architects have nothing to do with the stinginess or liberality of the Government in the abstract. It is their business only to know the size which the Government has prescribed for the



*buildings.* Dublin architects know that it foots up to some 3,900,000 cubic feet. They best know the cost of building in their own city, probably the dearest to build in in the kingdom, and they think that at even 8*d.* per cubic foot this looks like 130,000*l.* rather than 110,000*l.* Anything undefined about this, is there? In the face of facts and figures, what nonsense it is to lecture Dublin architects about "considering Kildare Street." Many of the influential persons concerned in this competition agree in the inadequacy of the money for the size of the building, and are doing their best to get over this difficulty at the instance of the "Dublin architects," and so remove an embarrassment from English competition rather than create one. When anyone says Dublin architects are "preparing the way for indignation meetings," he circulates an unfounded and unjustified libel.

The Dublin architects have never in the past had anything to say to indignation meetings, and in the late competition refrained from criticism and comment on the successful designs.

As to the assessorship question, your paragraphist's insinuation of a slight on Mr. John McCurdy is quite as unfounded, as honest Mr. John McCurdy, who has the esteem and respect of all his brother architects, would be first to tell him; but what the Dublin architects—Mr. McCurdy included—object to, and what the Dublin public disapprove of and resent, is the assessorship of *Royal Engineer officers*. "Colonels, *mon Dieu!*" said a worried official here, a Frenchman in a Government department, "why come these colonels at all to my department? Why are your British colonels not with their regiments?" No architects like Royal Engineers as "professional" assessors, and all the lecturing in *The Architect* for a hundred years to come would not make them do so. Colonel Festing and Colonel Ray—if you must have it out, and the names—are very distinguished men and Royal Engineers, but the architects did not like them as assessors in the last competition, and would prefer an independent civil architect. That is what their expression means—neither a slight nor depreciation of any of the honoured and respected Irishmen who constituted the committee of selection.

No "indignation" will be heard from any part of Dublin if the committee be reappointed; but *The Architect* may be prepared for a good deal of indignation, and plainly expressed too, if architects' plans are not submitted to an architect as assessor. The time does not require the defenders of our country at this juncture, however clever specialists they may be, in matters which are not their proper business.

Yours obediently,  
DUBLIN ARCHITECT.

SIR,—A good many competitors must be indebted to you for calling attention to the unsatisfactory state of the competition for the Dublin Museum. Judging from the past, it is of course an advantage for the Dublin architects if designs are not sent over from England, and for all we know the late declaration may be only a ruse to gain that end. If the members of the Royal Dublin Institute believed that the sum named in the conditions was inadequate, why have they been silent for so long a time? Knowing what labour and materials cost in Dublin, they ought to have been able to advise the Government much sooner of the difference between the profits expected in Ireland, and those with which an English builder has to be satisfied. A building like that proposed for Dublin could be erected anywhere in England at the price that is stated in the conditions. Why should the cost be more exorbitant at the other side of the channel? It has been often said that Ireland abounds in excellent building materials, and that her workmen can do as much masonry or carpentry as English workmen; with those conditions a building should be as cheaply erected in Ireland as in England. I have taken some pains to ascertain for my own guidance the relative cost of work in both countries, and I have made inquiries of men who carried out railway and other contracts in Ireland, but I have discovered nothing that confirms the statement of the Dublin architects about the exceptional expensiveness of Irish work. If they possess evidence derived from practice, they should have produced it. On the other hand, I think it is fair to assume that the authorities when they fixed the sum of 110,000*l.* were advised by the Commissioners of Public Works, who were aware of the real cost of Government buildings in Ireland.

My advice to English competitors is to go on with their designs, and not to be daunted by any efforts which may be tried (of course from patriotic motives) to bring about another failure or a merely insular competition. It is disheartening to an English competitor when he finds the *Times* (October 19) announcing that the museum "seems destined to be, in one form or another, a perpetual subject of contention," and that "no one will venture to predict when it will be finished." But from the difficulties of the case it becomes incumbent on the Government to have the project realised, and under the circumstances it is hardly possible that if the best design should come from England it will be again set aside to gratify Dublin and its Royal Institute. According to the *Times*, the Lord Lieutenant "has acted all through these disputes as a peacemaker, and has succeeded in getting the competition reopened to Irish architects, who had been practically excluded by

the conditions imposed by the Treasury and the Science and Art Department"! Peacemaking performances are probably expected from every Irish Viceroy, although they seem to lead to nothing that is profitable to actors or spectators; but it is to be humbly hoped His Excellency will remember, the next time he undertakes that line of character, that it is seldom good policy to sacrifice a piece for the applause of the noisiest part of the house.

Yours faithfully,  
A COMPETITOR.

#### The Architectural Association Hat and Coat Scramble.

SIR,—Will you kindly allow me to air a grievance? I want to complain of the treatment that several gentlemen experienced at last Friday's conversazione. I want to know, on the one hand, why one should be invited to spend three hours pleasantly occupied in listening to instructive eloquence, hearing high-class music, or gossiping with artistic and literary friends, whilst on the other hand one had to spend two of those three hours in a lobby, amidst cold draughts and pointed elbows, trying to catch the eye of the man whose duty was to "take care" of the hats and coats.

With a friend, and accompanied by two ladies, I arrived at the rooms of the Institute of Water-Colour Painters about eight o'clock. My friend and I doffed our hats and coats and struggled for forty-five minutes at a temporary counter, when we were at last relieved of the charge of our superfluous apparel and were enabled to join the two ladies (who had all this time been waiting on the stairs) and to mingle with the company.

Well knowing how difficult it had been to be relieved of one's hat or coat, my friend thought it advisable to be "wise in time," and try and obtain possession of them again, as he had a last train to catch (11.15); so he went at a quarter to ten to the caretaker's counter, vainly thinking that there would be no rush. I followed twenty minutes later on a similar errand, and after a half hour's struggle secured my hat and coat; but my friend, after an hour and a quarter's pushing and shouting, had to give up his search as hopeless, and at eleven o'clock had to leave to catch his train, to go a journey of thirty miles, hatless and coatless, and minus his umbrella. I lent him my hat, as I had not a long journey to do, and improvised for my own head a covering formed of my pocket-handkerchief, and by the aid of a cab got home.

My friend sent on Saturday to Piccadilly for his belongings. The officials found his hat, which, by the way, was originally designed to be a "tall hat," or "tile," but had been converted by Friday night's pressure into a "crush" hat. His coat and umbrella were not forthcoming; some rather short-sighted or colour-blind guest had mistaken them for his own property, leaving others of another colour behind; but they were promptly returned last Monday.

I do not know who is responsible for the miserable mismanagement which led to Friday's undignified hat scramble; whether it be the proprietors of the building in which the entertainment was given, or the committee of the Architectural Association. Surely it cannot be the latter body, as they, being architects, naturally know better than other people what cloak room conveniences are desirable to have made; they must also remember the Conduit Street fiasco of four years ago, when it was almost a free fight for hats and coats.

If it is not possible to get cloak room accommodation for more than 400 guests, and that 1,200 be expected, would it not be as well to dispense with dress coats altogether, and let the guests appear in shirt sleeves, a costume more fitted for a fighting fray in a small space, where hats are numerous and tempers are ruffled? Or else, let the male guests promenade about the rooms in tall hats and overcoats.

Yours truly,  
AN ILL-USED MEMBER OF THE A.A.

#### LEGAL.

Court of Session, Edinburgh.  
(Before Lord M'LAREN.)

ANDERSON AND BROWNE v. J. B. HOWARD.  
THE NEW LYCEUM THEATRE, EDINBURGH.

This action has been raised by Messrs. Anderson & Browne, architects, to recover from Mr. J. B. Howard, Edinburgh, payment of 542*l.* 10*s.* 6*d.* in respect of architect's fees, commission, and outlay, said to have been incurred on the defender's employment in connection with the building of the new Lyceum Theatre, Grindlay Street. Of this sum, 26*l.* 5*s.* is said to be due in respect of preliminary meetings and examination of sites; 24*l.* in respect of visits to and inspection of various English theatres in London and the provinces, including Manchester, Leeds, and Liverpool, from January 6 to 14 last; 462*l.* 10*s.* in respect of designs, &c., for the new theatre, at the rate of 2½ per cent. on the estimated cost of 18,500*l.*; 5*l.* 5*s.* for plans in the petition to the Dean of Guild for warrant to take down Cooke's Circus; and 6*l.* 10*s.* 6*d.* for travelling and incidental expenses. On February 12, it is added, the defender terminated his employment of the pursuers, on the alleged ground of their rejection of his proposal to appoint



a London gentleman to be joint architect, instead of consulting architect, as had been arranged. Otherwise, they would have been entitled to a further commission of 2½ per cent. on the estimated or total cost of the theatre. In defence, it was said that Mr. Browne, a member of the pursuers' firm, had been informed of the defender's intention, in the event of his not getting a renewal of his lease of the Theatre Royal, to erect a new theatre in Edinburgh, and that the preliminary visits and inquiries were made by Mr. Browne, not on defender's employment, but on his own responsibility and to suit his own purposes. The visits and inspections in England were undertaken on the same footing, the defender, having to be in London on other business, having agreed to accompany Mr. Browne, who had not previously had any experience in such work, and to facilitate his admission to the various theatres he proposed to visit, and at the same time to furnish him with any suggestions that might occur to him from his experience in the management of theatres. The defender also denies liability for the incidental and travelling expenses, but admits employment in regard to the Dean of Guild petition, and as to sketch plans for the new theatre. His instructions to them, however, were to prepare plans for the building at a cost not exceeding 15,000*l.*, and to be ready for occupation not later than September 1. He made no other arrangement with them regarding their further employment. After the lapse of six weeks, they submitted sketch plans at a cost of 3,500*l.* beyond the sum named, and defective and insufficient in many of the details requisite in a theatre. As they then rejected a renewed offer to appoint them joint architects with Mr. C. J. Phipps, architect, London—a gentleman of great experience in the construction of theatres—he entrusted the preparation of plans and the construction of the building to that gentleman. Though, the defender says, the pursuers' plans were entirely useless to him, he has, to avoid litigation, offered to refer the question to any one on whom they and he might agree, but this proposal was declined. The charge of 462*l.* 10*s.* for the preparation of said plans is in any case excessive.

His Lordship on Tuesday closed the record, and appointed proof to be taken in the case.

## CHURCH BUILDING AND RESTORATION.

**Bulwell.**—The Bulwell Wesleyan chapel is now opened for Divine worship, and has been completed with great credit to the builders, Mr. Joseph Munks, of Hucknall, and Mr. Thomas McCulloch, of Bulwell. The chapel occupies a very commanding site, and is much admired. The total cost is 3,435*l.* The architect is Mr. Councillor Wills, of Derby.

**Farnworth.**—The memorial-stones of the Congregational church, Francis Street, Farnworth, were laid recently, and the works are progressing rapidly. The design is a twelfth-century Gothic. The chapel has a chancel and transepts. There will be accommodation, including end gallery, for about 400 adults. The cost will be 2,470*l.*, and the architect is Mr. Councillor Wills, of Derby.

**Dewsbury.**—The corner-stone of a new church for the parish of Boothroyd has been laid. The church is being erected by Mrs. Hague, of Crow Nest, as a memorial of her husband. The plans have been prepared by Mr. Swinden Barber, of Halifax. The ground plan forms a parallelogram, 108 feet long and 48 feet wide inside the walls, divided by arcades of seven bays, forming a nave and chancel, with aisles 12 feet wide throughout. The columns of the arcades will be of Dalbeattie granite, with octagonal stone bases. The seats throughout will be of oak, substantial and plain in character. In the chancel, the floor of which is raised three steps above the level of the nave, open stalls will be placed for a choir of about forty-eight voices. The works have been let to the following: Messrs. W. & J. Milner, masons, of Mirfield; Messrs. J. Charnock & Sons, carpenters, Halifax; Mr. John Naylor, plumber, Halifax; Mr. T. Newton, slater, Ambleside.

## GENERAL.

**The Earl of Elgin** will open the Dunfermline Fine Art Exhibition on December 1.

**Mr. Richard Tangye**, of Birmingham, has presented, on the part of himself and his brother, Mr. Albert Moore's *Dreamers*, purchased by him from the Exhibition of the Birmingham Society of Artists, to the Corporation Art Gallery, in memory of the late Mr. Chamberlain.

**Mr. Sidney Cooper, R.A.**, last week distributed the prizes to the students of the Canterbury Sidney Cooper School of Art.

**Manchester Art Gallery.**—The following resolutions were passed on Wednesday: "That the offer of a water-colour drawing, *The Invincible Armada*, by Mr. Albert Goodwin, and of four drawings by Mr. R. Caldecott, *The Three Jovial Huntsmen*, be accepted; and that thanks be given to Mr. T. C. Horsfall for the presentation." "That the following pictures be purchased: *Nancy Lee, of Great Yarmouth*, by Phil. R. Morris, A.R.A., and *Old Putney Bridge*, by C. Napier Henry."

**Mr. J. E. Boehm, R.A.**, has completed the recumbent statue for Dean Stanley's tomb in Westminster Abbey.

**The Cathedral of Florence** has been reopened after restoration, and the new façade has been uncovered.

**The Liverpool Cathedral Sites Committee** have adopted a recommendation to engage skilled advice and assistance to report on the sites of Kensington Fields and St. James's Mount and Cemetery.

**A Piscina** has been found imbedded in the wall on the south side of the chancel at Great Orton church. The exterior resembles a Norman capital. The cavity in the wall was found coated with a close and very white cement.

**The Interior Roof Decoration** at St. Michael's Church Wandsworth Common, has been completed. It was carried out by Mr. Clay, from designs and cartoons by Mr. William White, F.S.A.

**A Stained Glass Window**, of four lights, has been erected in Sleaford church as a memorial of Mr. Thomas Parry, architect. It was executed by Messrs. Ward & Hughes, of Frith Street, Soho.

**Mr. Ruskin** will give two lectures at Oxford on the "Art of England," in completion of the series begun in the spring term. The subjects will be—(1) The Fireside: John Leech and John Tenniel (Wednesday, Nov. 7, repeated on Saturday, Nov. 10); (2) The Hillside: George Robson and Copley Fielding (Saturday, Nov. 17, repeated on Wednesday, Nov. 21).

**Mr. F. R. L. Edwards**, of Manchester, has been selected as architect by the Burial Board of Poulton-le-Fylde for the new cemetery and buildings in connection.

**Monsignor Consitt** will read a paper at the next general meeting of the Durham Architectural Society on "St. Godric."

**Professor Baldwin Brown** has agreed to deliver a course of four lectures to the members of the Edinburgh Architectural Association. The subjects are "General Survey of Christian Ecclesiastical Architecture up to the Thirteenth Century," "The Basilica and Domed Churches of the Fourth to the Ninth Centuries," "The Romanesque Church," and "The Rise of the Gothic Style in Northern France."

**Excavations** made by the French Tunisian Archæological Expedition in the neighbourhood of Bograra, El Kantara, have brought to light ruins of great buildings belonging to the Roman times. A marble temple, believed to have been dedicated to Zephyr, is remarkable for the great size of the blocks of which it is constructed.

**The Cambridge Union Society** have resolved to obtain specifications for a new hall for discussions. The cost will be about 6,000*l.*

**Messrs. John King, Limited**, of Liverpool, have received directions to heat Shandon church with their "small tube" hot-water heating apparatus.

**The Estimated Value** of the new buildings, alterations, and additions brought before the Greenock Dean of Guild Court during the past municipal year is 87,000*l.*

**The Derby Co-operative Society.**—This society has appointed Mr. Councillor Wills, of Derby, as their architect; and building operations are being carried on in several parts of the town, including a large grocery and provision store, in Leman Street.

**Labourers' Cottages** will shortly be erected in Ireland at the public expense. The Limerick Board of Guardians have resolved to erect one thousand. The cost is expected to be about 80*l.* each.

**Extensive Gasworks**, costing 150,000*l.*, have been opened at Bradford by the mayor. At present the works will produce two million and a half cubic feet of gas daily; but when fully finished they will be capable of producing eight million feet of gas a day.

**The Ottawa Canal Project** is being revived. The route was surveyed by the Canadian Government over thirty years ago, when it was proposed to utilise the French river to Lake Nipissing, and cut through a low ridge to the Montreal river. The navigable reaches of the Ottawa river now interrupted by rapids are to be connected by canals. The object of the new project is to make a waterway for sea-going vessels from the upper lake ports.

**Messrs. Vaughan & Brown**, gas engineers, of Farringdon Road, E.C., are executing the whole of the gas arrangements for the lighting of the new Alhambra Theatre, Leicester Square, including massive chandeliers and brackets for the auditorium, passages, and entrances. Their patent flash-light system has been applied to the stage. It enables the gas-man at the index plate to light or extinguish the whole of the stage arrangements instantaneously.

**Silver Medals** have been awarded to the following local exhibitors at the Derby Art Gallery: For workmanship and design in china, Mr. T. M. Lambert; for the best painting on china, Mr. A. J. Keene; for design and manipulation (a bronze medal given by Mr. J. Haslam), to Mrs. E. Bird; for detailed design and drawing in ecclesiastical works, Mr. F. J. Robinson; for the best architectural design, Mr. A. Macpherson; for measured architectural drawing (bronze medal), Mr. G. M. Coulson; for the best design for house decoration, Mr. G. Potter; and for modelling from life, Mr. H. W. Hogg.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, NOVEMBER 3, 1883.

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

### TENDERS, ETC.

*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

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### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas; and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRIDGEND.**—Nov. 20.—Plans are required for Disposal of Sewage by Filtration in the most economical and beneficial manner. Mr. T. Stockwood, jun., Clerk to the Local Board, Bridgend.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

### CONTRACTS OPEN.

**ABERDLOUR.**—Nov. 3.—For Building Dwelling-house at Bogfold. Messrs. Jenkins & Marr, Architects, 16 Bridge Street, Aberdeen.

**ACTON.**—Nov. 13.—For Supply of Blue Guernsey Granite, Kentish Flints, and Repair of Private Streets. Mr. C. Nicholson Lailley, C.E., Surveyor to the Local Board, Acton, W.

**ANDOVER.**—Nov. 5.—For Repairing Pits Mill, House, Farm Buildings, and Premises. Mr. John Hillary, Long-parish.

**ASTON-ON-MERSEY.**—Nov. 3.—For Re-roofing and Repairing Farm Buildings. Rev. G. W. Guest, Rectory, Lymm.

**BASSENTHWAITE.**—Nov. 10.—For Additions and Alterations to Scarness Cottage, for Sir H. R. Vane. Mr. George Richardson, 18 Bank Street, Carlisle.

**BATTERSEA.**—For Forming Roads and Footpaths, near Battersea Park. Mr. C. F. Reeks, 12 Middle Scotland Yard, S.W.

**BROMLEY.**—For Building Hospital for Infectious Diseases. Mr. J. Ladds, Architect, 4 Chapel Street, Bedford Row, W.C.

**BURNLEY.**—Nov. 14.—For Supplying 700 tons of Cast-iron Socket Pipes, 15 inches diameter, and for Carting, Laying, and Jointing 2½ miles of 24-inch and 15-inch Pipes. Mr. Edward Philliter, C.E., 16 East Parade, Leeds.

**BURRADON.**—Nov. 10.—For Building Methodist Chapel. Mr. Green, Colliery Office, Burradon, Northumberland.

**BURSLER.**—Nov. 5.—For Alterations to Black Lion Inn. Mr. J. Beardmore, Architect, Stoke-on-Trent.

**CAMELFORD.**—Nov. 7.—For Building Police Station. The Police Inspector, Camelford.

**CARDIFF.**—Nov. 8.—For Works in certain Streets. Mr. J. L. Wheatley, Town Clerk, Town Hall, Cardiff.

**CARDIFF.**—Nov. 7.—For Building Higher Grade School, in Howard Gardens. Messrs. James Seward & Thomas, Architects, St. John's Square, Cardiff.

**CHEVINGTON.**—Nov. 17.—For Alterations and Additions to the Chevington North Schools, Broomhill. Mr. William Webb, Clerk to the Chevington School Board, Newgate Street, Morpeth.

**CORK.**—Nov. 3.—For Building Diocesan College. Mr. Samuel F. Hynes, Architect, 46 South Mall, Cork.

**CROYDON.**—Nov. 19.—For Laundry, Engineering Fittings Engine, Boilers, &c., for the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon. Messrs. Berney & Monday, Architects. Mr. Henry Ward, C.E., Engineer.

**CROYDON.**—Nov. 19.—For Plans for Cooking Apparatus, &c., for 643 Persons, at the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**CROYDON.**—Nov. 19.—For Gasfittings at the New Infirmary, Mayday Road. Specification by Messrs. Berney & Monday. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**DAWLISH.**—Nov. 3.—For Enlarging St. Mark's Chapel. Messrs. Hayward & Son, Architects, 50 High Street, Exeter.

**DRESDEN, LONGTON.**—For Building Congregational Church. Messrs. W. Sugden & Son, Architects, Leek.

**DUBLIN.**—Nov. 7.—For Supply of an 8-foot Cylindrical Lightship Lantern. Mr. Owen Armstrong, Secretary, Irish Lights Office, Dublin.

**DURHAM.**—Nov. 17.—For Building Industrial Schools at Earl's House Farm. The County Architect, Durham.

**EASTBOURNE.**—Nov. 3.—For Building Town Hall and Municipal Buildings. Mr. C. Tones, Surveyor to the Local Board, Eastbourne. Mr. Tadman Foulkes, Architect, 100 Colmore Row, Birmingham.

**EXETER.**—Nov. 6.—For Erection of a Villa Residence, with Stabling, &c., at Duryard Park, Cowley Bridge Road. Messrs. Packham & Croote, Architects, 93 Paris Street Exeter, and Market Chambers, Tiverton.

**GOSFORTH.**—Nov. 12.—For Building Wesleyan Chapel. Mr. J. J. Lish, Architect, Scottish Chambers, Grainger Street West, Newcastle-on-Tyne.

**GREAT HORTON.**—Nov. 9.—For Additions and Alterations to Dirkhill Stores. Mr. John Drake, Architect, Winterbank, Queensbury.

**GRIMSTON.**—Nov. 13.—For the Erection of Three Bridges near Grimston, on the Wilts and Somerset Branch Railway. Plans and Specification at the Office of the Engineer Reading Station.

**GUNNERSBURY.**—Nov. 7.—For Tar Paving, Flagging, Making-up, &c., at Wellesley Road East. Mr. J. E. Strachan, Surveyor, Vestry Hall, Turnham Green.

**HACKNEY WICK.**—Nov. 7.—For Building Bedrooms, Bathroom, &c., at the White Lion. Mr. John Ladds, Architect, 4 Chapel Street, Bedford Row, W.C.

**HOVE.**—Nov. 22.—For the Construction of a Sea Wall, Inclines, Steps, and Timber Groynes, on the East Fore-shore of the Town. Sir John Coode, Consulting Engineer, 5 Westminster Chambers; and Mr. E. B. Ellice Clark, Engineer to the Hove Commissioners, Town Hall, Hove.

**IPSWICH.**—Nov. 10.—For Building Six Houses, Rosemary Lane. Mr. William Eade, Architect, Post-Office Chambers, Ipswich.

**IRVINE.**—Nov. 17.—For Building Shed and Offices at Irvine Academy. Mr. John Armour, jun., Architect, Irvine.

**KENDAL.**—Nov. 16.—For Building Residence, Stabling for Fifteen Horses, Carriage Houses, Barn, Loose Boxes, &c., Windermere Park. Mr. Eli Cox, Architect, Government Offices, Highgate, Kendal.



**KEIGHLEY.**—Nov. 10.—For Taking Down and Rebuilding portion of Messrs. Summerscale's Works. Mr. J. B. Bailey, Architect, North Street, Keighley.

**LONDON.**—Nov. 5.—For the Supply of Cast-iron Water Mains and Special Castings. The Chairman, Southwark and Vauxhall Water Company, Sumner Street, Southwark, S.E.

**LONDON.**—Nov. 20.—For Building Five Blocks of Artisans' Dwellings, Petticoat Square, Middlesex Street. Mr. Henry Blake, Sewers' Office, Guildhall.

**LONDON.**—For Lighting by Electricity the Central Square, Spitalfields Market. Mr. Henry Lovegrove, Surveyor, 26 Budge Row, Cannon Street, City.

**MIDLAND RAILWAY.**—Nov. 15.—For Erection of Additional Shed for Stores Department at Derby. Drawings, &c., at the Engineer's Offices, Derby Station.

**MIRFIELD.**—Nov. 6.—For Building Engine-shed, Coal Stage, &c. Mr. J. H. Stafford, Hunt's Bank, Manchester.

**MORLEY.**—Nov. 3.—For Additions and Alterations to Bridge Street Mill. Mr. T. A. Buttery, Architect, Paragon Buildings, Queen Street, Morley.

**NAISBURY.**—Nov. 6.—For the Construction of a Covered Reservoir and Tenter's Cottage at Naisbury, near Hart. Mr. Thomas Trewitt, Secretary, Gas and Water Company's Offices, West Hartlepool.

**NORTH-EASTERN RAILWAY.**—Nov. 14.—For Construction of the Alnwick and Cornhill Branch Line in Two Contracts. Plans at the Engineer-in-Chief's Office, Central Station, Newcastle-on-Tyne.

**OLD MONKLAND (SCOTLAND).**—Nov. 9.—For Extension of the Cemetery at Old Monkland. Messrs. Simpson & Wilson, 175 Hope Street, Glasgow.

**PETERBOROUGH.**—Nov. 22.—For the Supply and Delivery of 165 tons of Cast-iron Socket Pipes and 5½ tons of Special Castings, 42 Sluice Valves and Surface Boxes, and 50 Hydrants and Surface Boxes. Mr. W. Matthews, C.E., Borough Engineer, Peterborough.

**POPLAR, E.**—Nov. 14.—For Sinking an Artesian Well, for the Supply of Water to the Public Baths and Wash-houses, All Saints, Poplar, E. Mr. George Wooldridge, Clerk to the Commissioners.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**RAWMARSH.**—Nov. 13.—For Construction of new Street. Mr. J. W. Bellamy, Clerk to the Local Board, Rawmarsh.

**ROYTON JUNCTION.**—Nov. 5.—For Widening Public Road Bridge, Building Retaining Wall, Constructing Foot-bridge, Forming Footpath, Excavation and Drainage on Land near Royton Junction. Plans at the Engineer's Office, Hunt's Bank, Manchester.

**STRATFORD.**—Nov. 13.—For Erecting Block of School Buildings in Carpenter's Road. Mr. J. T. Newman, Architect, 2 Fen Court, E.C.

**UDDINGSTON.**—For Building School, Teacher's House, Boundary Wall, &c. Mr. William Ingram, Architect, 134 Bath Street, Glasgow.

**WELLS, NORFOLK.**—Nov. 9.—For Building Coast Guard Station. The Director of Works Department, Admiralty, 71 Spring Gardens, S.W.

**WITHINGTON.**—Nov. 5.—For the Labour in the Laying, and Materials for Jointing of 650 lineal yards of 30-inch Cast Iron, Socketed Pipe Conduit, near the Sewage Farm, at Chorlton-cum-Hardy, and Formation of an Embankment and Works in connection. Mr. J. Swarbrick, Surveyor to the Board, Town Hall, Withington.

**WOLVERHAMPTON.**—Nov. 8.—For Construction of Hospital Pavilion, Administrative Buildings, Disinfecting Station, Laundry, Ambulance Shed, Mortuary, Fence, and Entrance Gates. Mr. G. E. Thoms, Town Hall, Wolverhampton.

**WORTHING.**—Nov. 5.—For Labour in Construction of Groynes and Sea Defences. The Board's Surveyor, Town Hall, Worthing.

**WREXHAM.**—Nov. 10.—For the Construction of Service Reservoir and Filter Beds at Gronwen, near Wrexham. Mr. Frederick Storr, Engineer, Waterworks Offices, 6 Charles Street, Wrexham.

**BOGNOR.**

For Constructing 700 feet of 12-inch Pipe Sewer, with Manholes, &c., Bognor. Mr. W. L. BARRETT, Surveyor.

Burrell, Littlehampton	£151	0	0
Booker Bros., Bognor	145	0	0
Newell, Bognor	135	0	0
Dearle, Eastbourne	119	8	6
TATE, Bognor (accepted)	109	17	6

**BOOTLE-CUM-LINACRE.**

For Street Works, Marsh Lane, Bootle-cum-Linacre. NUTTALL, Bootle (accepted).

**BOURNEMOUTH.**

For the Erection of a House in the Derby Road, Bournemouth, for Mrs. Roy. JENKINS & SON (accepted) £3,128 0 0

**BREADSALL.**

For the Erection of New Farmhouse and Offices.

Walkerline	£1,800	0	0
Bakewell	1,713	0	0
Walker & Sons	1,640	0	0
Noon & Sons	1,639	16	0
Slater	1,565	0	0
PORTER, Derby (accepted)	1,524	0	0

**BROMLEY.**

For Erection of Detached Residence, Boundary Walls, Laying Out Garden, &c., at Bromley.

Payne	£1,643	0	0
Crossley	1,493	0	0
Kennard Bros.	1,470	0	0
Bolding	1,380	0	0
Allen	1,212	0	0
Harryman	970	0	0

**CAMBRIDGE.**

For the Erection of Two Houses at Cambridge.

Yarrow	£1,500	0	0
PARCELL (accepted)	1,200	0	0

For the Erection of a Farmhouse at Barley for Mr. H. C. Briscoe.

Ramsay	£1,260	0	0
Jones & Son	1,235	0	0
Isaac & Co.	1,220	0	0
BAILEY (accepted)	1,209	0	0

**CARDIFF.**

For Building a School-chapel in Mining Street, Cardiff. Mr. J. P. JONES, 26 Park Street, Architect.

Lewis	£420	0	0
Ransom	393	0	0
D. Davies	390	0	0
D. J. Davies	375	0	0
JAMES (accepted)	359	0	0

Caretaker's Cottage.

JAMES (accepted) 111 0 0

**COCKERMOUTH.**

For Erection of Shop, Dwelling House, Warehouse, and Enclosed Walls, for W. Young, Station Road, Cockermouth. Mr. R. S. MARSH, Surveyor.

Accepted Tenders.

Edger & Dunn, Cockermouth, builders.

Armstrong, Cockermouth, joiner and slater.

**COMPTON GIFFORD.**

For Steel Works, Compton Gifford.

Piper	£395	15	0
Shaddock Bros.	292	17	0
FEATHEYJOHNS (accepted)	291	7	0

**EASTCHURCH.**

For Painting Eastchurch National Schools, School House, and Fencing and Repairing. KNIGHT, Sheerness (accepted) Bligh, Eastchurch.

**FOLKESTONE.**

For new Billiard and Work-rooms, Folkestone.

Brooks	£1,000	0	0
Clemmans	995	0	0
Pelts	990	0	0
Dunk	975	0	0
Baker	960	0	0
Webster	950	0	6

**GREAT YARMOUTH.**

For Drainage Works, Great Yarmouth. Mr. J. WM. COCKRILL, Borough Surveyor. Quantities supplied.

Harbert, Yarmouth	£2,200	0	0
Botterill, London	2,129	0	0
Wood, Chelmsford	1,904	0	0
Cork & Beech, Yarmouth	1,802	5	0
HAYWARD, Eastbourne (accepted)	1,757	0	0
Surveyor's estimate	1,900	0	0

**HANLEY.**

For Constructing Wrought-Iron Bridge across the Cauldon Canal at Nelson Place, also for Sundry Girders for Bucknall Road Bridge, for the Town Council. Mr. JOSEPH LOBLEY, Hanley, Borough Surveyor.

Tildesley, Willenhall	£559	0	0
Hill & Smith, Brierley Hill	519	5	0
Renshaw & Co., Kidsgrove	519	12	0
Butterley Company, Derbyshire	489	12	0
W. & O. E. Brettell, Worcester	472	12	0
HARTLEY & ARNOUX BROS., Stoke-on-Trent (accepted)	390	5	0

**LEEDS.**

For Building Boundary Walls and Sewering and Levelling Site of Intended Cattle Market, Whitehall Road, Leeds. NOWELL, Headingley (accepted).

**HAWORTH.**

For Erection of Residence, Haworth, Yorks, for Mr. E. R. Merrall. Mr. J. B. BAILEY, Architect, Keighley.

**Accepted Tenders.**

J. & W. Beauland, Bradford, mason, bricklayer, carpenter, and joiner.  
Thornton, Bingley, slater.  
Harrison & Sons, Keighley, plumber and glazier.  
Dixon, Bradford, plasterer.

**LEYLAND.**

For Providing and Laying 600 yards of Water Mains below 3 inches in diameter; also for Making Water Supply Connections and Providing and Fixing Fittings, Lead Piping, &c., Leyland. WALMSLEY & Co., Preston, Schedule.

**LITTLE BYTHAM.**

For Building Board Schools and Master's House, Little Bytham. Mr. F. G. SHILCOCK, Architect, Bourn.

Ludlow & Emerson, Stamford	£710	0	0
Sharpe & Holmes, Bytham	709	10	0
Wallis & Son, Spalding	700	0	0
Story & Son, Swinstead	675	0	0
Woolston, Stamford	650	0	0
HINSAW & SONS, Stamford (accepted)	547	17	6
Lion, Bell & Sanford, Stamford	500	0	0

**LONDON.**

For Alterations and Additions at the Shoreditch New Almshouses. DOUGLAS (accepted).

For Alterations and Repairs to Houses in Hatfield Street, St. Luke's. WOOLLEY (accepted).

For Additions and Repairs to Nos. 1 to 12 Addey Street, Deptford. BRABHAM (accepted).

For Alterations and Additions to the Clapton Park Club and Institute, 60 Brooksbys Walk, Homerton. GOWER & PETTIPHER (accepted) £452 15 0

For Erection of Walls on South and West Side of the Infirmary, Dartmouth Park Hill, for the Guardians of the Poor of St. Pancras. LAMBLE (accepted) £215 0 0

For the Erection of the Nightingale Tavern, Nightingale Lane, Wanstead.

Mansfield	£1,275	0	0
Buckle	1,100	0	0
Nicholls	1,020	0	0
ENGLAND & THOMPSON (accepted)	965	0	0

For Alterations to Stables and Erecting Dwelling-house for Messrs. Carter, Paterson & Co., at Camberwell.

Downs	£487	0	0
Hubble & Trott	450	0	0
Higgs	420	0	0
Harris & Wardrop	390	0	0
Watkins	345	0	0
D. D. & A. Brown	344	0	0
Aldridge & Jenvey	321	10	0

For Additions to Carriage Works, 149 and 151 Euston Road, for Mr. Stenning.

Royal	£1,036	0	0
Jackson & Todd	949	0	0
Marriage	905	0	0
Gould & Brand	895	0	0
Dixon	862	0	0
Spencer & Co.	847	0	0
LAMBLE (accepted)	837	0	0

For Reinstatement after Damage by Fire at the Goldsmiths' Arms, Bartholomew Close, for the New Westminster Brewery Company.

Bull	£257	0	0
King & Son	234	0	0
Pemberton	230	0	0
Hoare & Son	228	0	0
LAMBLE (accepted)	217	0	0

For Repairs to Depot Premises, for the Vestry of St. George the Martyr.

Cassell Bros.	£263	0	0
Hough	59	12	6
Green	57	0	0
Shilton	45	0	0
Earle	39	10	0
BYFORD (accepted)	37	0	0

For Alterations at the Belgrave Tavern, Finchley, for the New Westminster Brewery Company.

Bull	£256	10	0
King & Son	240	0	0
Pemberton	238	0	0
LAMBLE (accepted)	227	0	0

For Repairs at the Railway Tavern, Kingsland, for the New Westminster Brewery Company.

King & Son	£155	0	0
Bull	148	0	0
Pemberton	137	0	0
Hoare & Son	129	0	0
LAMBLE (accepted)	129	0	0

For Proposed Alterations and Additions to the Springfield Park Tavern, Bowes Park, N., for the directors of the Birkbeck Trust.

Brown	£1,050	0	0
Voller	1,049	0	0
Smith	1,045	0	0
Oldis Bros., Finsbury Pavement	990	0	0
BEALE (accepted conditionally)	847	10	6

For Alterations and Additions at the Duke of Edinburgh Tavern, Albany Road, Camberwell.

Prior	£298	0	0
D. D. & A. Brown	298	0	0
Beale	281	0	0
Everitt	280	0	0
Luker & Johnstone	269	0	0
Gapper	209	0	0

**TENDERS.****BERECHURCH.**

For Gardener's Cottage, &c. at Berechurch, Colchester, for Mr. Bart Rous, Mr. R. STARK WILKINSON, A.R.I.B.A., Architect, 14 Furnival's Inn, E.C.

Dobson, Colchester	£328	0	0
Chambers, Colchester	323	0	0
Ward, Colchester	323	0	0
Dupont, Colchester	322	0	0
Oldridge, Colchester	322	0	0
Lee, Colchester	320	0	0
Everett & Son, Colchester	319	0	0
Shead, Berechurch	310	0	0
Eate, Leeden	299	0	0



LONDON—continued.

For new Water-closets, &c., at Tennyson Road Board School.		
Pritchard . . . . .	£126 15 0	
Rice . . . . .	99 15 0	
Mallett . . . . .	98 0 0	
For Two Sliding Partitions at Hawley Crescent Board School.		
Wall . . . . .	£109 0 0	
McCormick & Sons . . . . .	107 10 0	
Pritchard . . . . .	103 0 0	
For Rebuilding No. 36 Grosvenor Square, for Mr. C. H. Wilson, M.P. Mr. GEO. DAVEY, Architect.		
Smith & Co. . . . .	£17,768 0 0	
Adcock, Dover . . . . .	17,745 0 0	
Trollope . . . . .	17,343 0 0	
Fish, Prestige & Co. . . . .	16,990 0 0	
Thorn . . . . .	16,785 0 0	
Higgs & Hill . . . . .	16,580 0 0	
Messon . . . . .	16,293 0 0	
Shepherd . . . . .	15,985 0 0	
For Building Factory at Tufnell Park Mills, Holloway, for Mr. S. Townsend. Mr. C. H. FLACK, Architect.		
Wilson & Exton . . . . .	£4,460 0 0	
Scott . . . . .	4,443 0 0	
Fish, Prestige & Co. . . . .	4,357 0 0	
Downs . . . . .	4,327 0 0	
Harris . . . . .	4,108 0 0	
Ford & Son . . . . .	4,060 0 0	

For Alterations and New Roof to Mineral Water Manu- factory, Nos. 125 to 128 High Street, Shadwell. Contract No. 1.		
Bragar . . . . .	£345 0 0	
Mansell . . . . .	320 0 0	
Blow . . . . .	225 0 0	
Buckle . . . . .	185 10 0	
ENGLAND & THOMPSON (accepted) . . . . .	175 0 0	
For the Erection of Dwelling House and Offices, Randall Street, Battersea.		
Holland . . . . .	£278 0 0	
Plumridge . . . . .	275 0 0	
Baker . . . . .	232 0 0	
Moore . . . . .	175 10 0	

SILSDEN.

For Building Mechanics' Institute, Silsden. Mr. J. B. Bailey, Architect, Keighley.		
Accepted Tenders.		
Tillotson, Silsden, mason and bricklayer.		
Cowling, Silsden, carpenter and joiner.		
Hill & Nelson, Bradford, slater.		
Newbould, Keighley, plumber and glazier.		
C. & J. Laycock, Silsden, plasterer.		
Tillotson & Harrison, Keighley, painter,		

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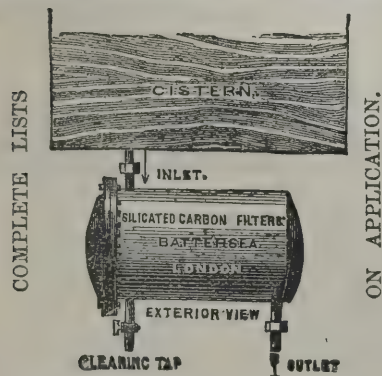
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NOTTINGHAM.

For Construction of Storm Water Culvert, Nottingham. Mr. BROWN, Borough Engineer. Quantities by Messrs. Hovenden, Berridge & Barnes.		
Parkinson & Bower, Halifax . . . . .	£58,500 0 0	
W. Cordon, sen., Nottingham . . . . .	58,139 0 0	
Rayner, Bootle, Liverpool . . . . .	55,500 0 0	
Stevenson, Market Harborough . . . . .	53,000 0 0	
G. Smith, Workington . . . . .	50,539 4 0	
W. Smith, Workington . . . . .	47,119 17 8	
Ward, Leicester . . . . .	46,000 0 0	
Lawson, Glasgow . . . . .	45,979 0 0	
Pearson & Son, King's Lynn . . . . .	45,000 0 0	
Botterill, London . . . . .	44,999 0 0	
W. Cordon, jun., Nottingham . . . . .	44,872 7 0	
Holme & King, Liverpool . . . . .	44,733 11 0	
Baker & Sons, Chesterfield . . . . .	43,800 0 0	
Smart, Nottingham . . . . .	41,999 0 0	
J. & G. Tomlinson, Derby . . . . .	41,812 0 0	
Nowell, Manchester . . . . .	40,748 7 6	
Lovatt, Wolverhampton . . . . .	40,730 0 0	
Moss, Stafford . . . . .	40,484 7 6	
Kellett & Bentley, London . . . . .	38,350 0 0	
FOSTER & BARRY, Nottingham (accepted) . . . . .	38,000 0 0	
W. & T. Denne, Walmer, Kent . . . . .	37,986 0 0	
Benton & Woodiwiss, Derby . . . . .	37,415 7 6	
Dickson, St. Albans, Herts. . . . .	36,927 0 0	
Hill Bros., High Wycombe . . . . .	34,942 2 6	
Meats Bros., Nottingham . . . . .	33,000 0 0	
Engineer's estimate . . . . .	39,250 0 0	

PORT ELIZABETH.

For the Erection of Municipal Market Buildings, Port Elizabeth, Cape of Good Hope. Mr. W. H. MILES, Architect. Quantities by the Architect.		
Mackay, King William's Town . . . . .	£40,750 0 0	
Munroe, Cape Town . . . . .	34,750 0 0	
Carter, Port Elizabeth . . . . .	34,342 0 0	
Small & Morgan, Port Elizabeth . . . . .	33,550 0 0	
Beckett & Porter, Port Elizabeth . . . . .	33,300 0 0	
Young & Craik, Port Elizabeth . . . . .	33,124 0 0	
Light, Port Elizabeth . . . . .	31,503 0 0	
Rowell, Port Elizabeth . . . . .	31,480 0 0	
Pell, Port Elizabeth . . . . .	29,773 0 0	
Gordon, Port Elizabeth . . . . .	29,705 0 0	

The Council are doing the work departmentally, under the  
management of the architect.

SOUTHAMPTON.

For Street Works, Southampton. Mr. W. B. G. BENNETT, Borough Surveyor.		
Green & Burleigh, London . . . . .	£783 0 0	
CROOK & CO., Southampton (accepted) . . . . .	730 0 0	

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**WESTWOOD GROUND,** BOX GROUND  
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# The Architect.

## THE OPENING MEETING OF THE INSTITUTE OF ARCHITECTS.



THE second session of what we may be excused for calling the jovial presidency of Mr. HORACE JONES was inaugurated on Monday evening by a characteristic address. No one, be he ever so cynically inclined, can help feeling pleased when Mr. JONES speaks. An orator he is not. His style of language is not that of the literary world. His occupancy of the supreme position he happens to hold, as head of the architectural profession in the empire of Her Majesty QUEEN VICTORIA, and representative for England in the face of the world of a world-wide historic brotherhood of art and science, may be said without offence to have come about somewhat by chance. The *régime* under which he takes the chair once filled by COCKERELL, TITE, DONALDSON, and SCOTT, may be regarded by many as a mistake and a failure—now, by the way, perhaps to be rectified. But nevertheless, when the end comes, it will, we have no doubt, be universally acknowledged that the worthy City Architect has done his best to make his reign at Conduit Street not only honourable, but—what we are forced in some cases to consider quite as worthy of commendation in the world as we find it—cheerful and happy. We will even venture to take so much of a literary liberty with our readers as to assert that in times to come the “jolly” presidency of HORACE JONES will long be remembered by that very title, and perhaps favourably contrasted with more brilliant but less enjoyable times.

Commencing with a pardonable if unexpected allusion to the near approach of Lord Mayor's Day, and a kindly reference to the losses recently suffered by the Institute through death, the President proceeded to business like a man of business. The contrast which he could scarcely help drawing between the “Two Palaces of Justice”—on the same line which was taken in this journal a week ago—was followed out with commendable spirit; and we are glad to find that Mr. HORACE JONES, as a practical man who has had much to do with large outlay in building, and in a field where commercial considerations hold the supreme place, is soberly of opinion with ourselves that the habitual niggardliness of the English Government in respect of architectural enterprise is not only shabby, but financially mistaken. In this, indeed, as in so many other things, there are those who scatter and yet increase, and there are those who withhold their hand and it profiteth them not. A short step took the President from his lamentations over Mr. STREET's Law Courts to the hopes he entertains regarding the embellishment of Blackfriars Bridge with sculpture. Judging by his semi-official account of this matter, we are disposed to think that the resolute way in which our public authorities seem to persist in following the process of “How Not to Do it,” is being once more exemplified in this case in the proceedings of the City Corporation—just once more before the grand display in the business of the new War Office shall come on. The length to which, if we can credit our ears, the proceedings have in this case gone, is that a model is about to be set up for public criticism on one of the pedestals of the bridge, which is to be supposed by critics to represent chivalry or cavalry in the abstract. The group is so devised, the worthy President thinks—this is his own personal impression apparently—as to be taken to represent any subject we like; we pay our money and we have our choice. Some of us may take it for the Constable BOURBON and his war-horse, or the Chevalier BAYARD and his charger; some for Don QUIXOTE and Rosinante; some, perhaps, for a new edition of our own Duke and Copenhagen. The peculiar, and, so far as we know, unprecedented virtue of this piece of statuary is that it has no special purpose whereby to provoke rivalry of sentiment. The profane may be reminded of poor ARTEMUS WARD, one of whose most admirable and useful wax-works, having in turn served for MARY, Queen of

Scots (if we do not mistake), OLIVER CROMWELL, and General JACKSON, was now doing duty as Sir EDMUND HEAD—we beg pardon, but we had almost written by a sort of instinct Sir EDMUND BECKETT. A sceptical observer, at any rate, having questioned the likeness to the new original, the words of the great showman were firm and conclusive—“I call it Sir EDMUND HEAD; *you* may call it what you darn please!” It is the avoidance of all such difficulties, we understand, that the civic mind of the Guildhall is now bent upon, and we will only say that we hope success may crown an effort so laudable in a direction so novel.

The President's lengthy representations respecting the proposed new line of communication across the Thames below London Bridge seemed to be listened to with some amount of polite impatience; but on reflection most of us will perceive that it was quite within the rule of the fitness of things that the City Architect should take the opportunity of making a statement to the profession at large of his views upon a question of such great moment, in which he was known to have taken so important a part. His arguments and figures may be left to speak for themselves.

The very interesting subject of the examination test recently set on foot in the Institute had little, if any, additional light thrown upon it by the presidential address. We may remark that the admission, at an earlier stage of the sitting, of two new associates who had entered by examination, was received with some enthusiasm; which at any rate indicates a certain hopefulness as regards the practical operation of the new regulation. We also observe with satisfaction that a provincial examination is about to be held at Glasgow if a sufficient number of candidates come forward. The Council are feeling their way cautiously and slowly, but those who regret that examinees are so few must be urged to exercise patience. An educational test, if to be of any real value, is a thing that always takes time to develop.

The cry of the country members has at last been heard within the sacred penetralia of the Council, and steps are to be taken to allow them, in some sort, that participation which they are so obviously entitled to demand in the election of officers and the discussion of by-laws. The legal adviser of the Institute, however, gives it as his opinion that the accidental phraseology of the charter absolutely prohibits every member from voting who is not “present in person” at the moment. We are sorry for this; and we venture at any rate to remind the members of the shrewd axiom that before you act upon counsel's opinion you ought to peruse the “case.” But, be this as it may, what the Council offer to that half or more of the general body who cannot possibly be “present in person” is that they shall have some privilege of “nomination,” which we confess we cannot understand to be worth anything at all. In some similar way the “non-metropolitans” are to be permitted to make representations about the by-laws. All this seems simply childish; and we can only advise interested members to persist in their agitation for a *real* share in the administration of affairs, all legal quibbling notwithstanding.

On the delicate question of the “nomination” of the men who are to hold office—an act which in present practice enables a small coterie virtually to compel the constituency to accept them in a body as irresponsible and secret rulers for ever, the elective process being so hedged about by artificial restrictions as to be only a palpable sham—the President announces that the Council have at any rate so far yielded to universal pressure as to recommend that the nomination of a president—their own nomination, of course—may be made in the person of “any fellow or honorary fellow” whatsoever. But inasmuch as it has always been open to every member outside the Council to propose of his own accord “any fellow or honorary fellow” as an opposition candidate—a course which was actually pursued with success in the case of Mr. STREET only two years ago—we fail to see what boon is supposed to be here offered. In the next place the Council propose to be allowed to nominate for the vice-presidency any three members they please, provided they are chosen from within their own body. Lastly, as regards “the retirement of members of council by rotation,” they declare with singular *naïveté* that this “is not desirable.” Vice-presidents, however, they acknowledge, ought to withdraw after six years' service. With reference to all this, we will simply say that we are tired of discussing such shameless trivialities. Imperialism like this is a very small game, and had far better be given up with a good grace while it can be. In these days the prosperity of any learned society—nay,



even that of any respectable trades-union—is in direct proportion to its freedom from invidious personal distinctions of the kind which these gentlemen are determined to maintain. We cannot consent to endorse what Sir EDMUND BECKETT has been saying lately in the *Times* about the decadence of the Institute, but neither can we venture to deny that he has some ground for even the worst of it. The kind-hearted president himself was constrained to say in winding up his discourse that the Institute is “in a critical position,” owing to the want of “unity and fraternity”; and we are bound to acknowledge that this is only too true. But how can “unity and fraternity” be compatible with the ungenerous system of false exclusiveness which has of late years come to be foisted upon the society no one knows how? Let the freedom of former times be restored, and the “unity and fraternity” of former times will reappear. Complaints of the impracticability of everything are universally heard; and it is high time the main body of members aroused themselves to the real danger, not only to the guild in Conduit Street, but to the profession all over liberty-loving England, which is involved in the continuance of an incomprehensible reaction which none can profess to understand, and none but the least dignified and most accidental members of the Council can desire to uphold. The Institute requires simply to be freed from a system of clumsy artificial restrictions, by which individuality and personal earnestness are repressed, and not even the false dignity of histrionic authority is substituted—by which no one but “the Council” is permitted to say or to do, while “the Council” says and does—nothing.

#### LABOURERS' AND ARTISANS' DWELLINGS.

LORD SALISBURY'S paper in the *National Review* will be chiefly valuable as a means of extending, and at the same time intensifying, the interest which is now taken in the important subject of which it treats. It is not a practical paper; but its advocacy of more exact and full inquiry is well-timed, and likely to have a useful influence on public opinion. That such additional inquiry is needed no one who has attempted to master the subject can deny. “The subject is very complex, and requires the light of fuller information than has yet been collected;” and, it may be added, we require an “investigation by authority” which shall take a much wider range than would suffice for merely ascertaining “the real extent and circumstances of the overcrowding that has to be cured.” If Lord SALISBURY'S remarks do nothing more than give an impetus to the general demand for such investigation he will have well merited our gratitude. It must be confessed, however, that the paper, as a whole, is somewhat disappointing. It is characterised by the narrow provincialism of the mere Londoner rather than the breadth and comprehensiveness of the great statesman; and in much that has been written by our contemporaries the same spirit predominates. It is the London poor who are commiserated; it is they who are to be helped, and much is to be done towards the complete solution of the whole labourers' and artisans' dwellings difficulty by an expenditure of Government money through the agency of a purely local charitable organisation—the PEABODY Trust! This indeed is the only practical suggestion made. The necessities which exist, and the peculiar difficulties which beset the question in other great centres of population are not referred to, and are probably not understood; and yet it would argue an amount of ignorance almost inconceivable to suppose that the call for remedial measures is less clamant in the great provincial cities than in London itself, or that they are easier of accomplishment. What then has Lord SALISBURY to say about them? Absolutely nothing; for of course it cannot be seriously intended that Government aid is to be administered in Manchester or Edinburgh through the agency of the PEABODY Trustees. And sharing as we do his lordship's objection to the intervention of municipal corporations, we are left by him without the slightest indication of a policy to cope with the evil which presses on one portion—and that the largest portion—of the wage-earning classes of the country. His only practical suggestion, indeed, is inapplicable on the extended scale which the exigencies of the case demand, and does little more than touch the fringes of difficulties which the national, as distinguished from the local, reformer has to face.

Besides, preponderating as in some respects the claims of

London undoubtedly are, it is not to be supposed that the country will consent to meet them by exceptional legislation in the advantages of which Liverpool, Manchester, Glasgow, and other large towns shall have no share. If it be so that “the increase of prosperity tends rather to aggravate the existing evil than to lighten it,” that “it is in fact directly caused by our prosperity,” may it not be pertinently asked if there is any reason why this exuberant prosperity should not be taxed to mitigate the evils which it causes and aggravates? It can hardly be argued that the prosperity of Glasgow, for instance, has any tendency to overcrowd the dwellings of the London poor; still less can the prosperity—or adversity—of the agricultural classes throughout the country have anything to do with it; so that in whatever way we look at it, it would appear that if the case of London is to be treated exceptionally, the people of the metropolis, creating and aggravating the evils which beset their poor by their own prosperity, may most reasonably be asked to do what is necessary, not perhaps without State interference, but certainly without State money. But we prefer to take a broader view of the national need and the national duty. There is no important town, nay, hardly a village, in the land where the same miserable conditions of unwholesome overcrowding do not in some measure—we may say in a proportionate measure—exist; and although in certain phases of it this deplorable state of matters may with some propriety be connected with the prosperity of our cities as well as with the steady increase of the population, yet it may well be doubted if it is not rather more truly and largely due to increasing extravagance, profligacy, and—last, not least—indifference; an indifference which must be dissipated before any adequate impression can be made on the arrears of work which we have allowed to accumulate before our eyes with callous unconcern. Nothing is more remarkable in Lord SALISBURY'S article than his testimony to the efficiency of Miss OCTAVIA HILL'S method. He admits that she has done more than the PEABODY Trustees or any of the other wealthy organisations towards ameliorating the condition of the poorest classes, and he sees and acknowledges the vast power of the principle on which she relies. But the labourers are few. Miss HILL and her noble associates are indeed the pioneers of what may almost be called our forlorn hope. She has not only perceived the narrow practicable breach in the unobliterated human aspirations and sympathies of the most neglected and debased, but, planting her foot firmly there, she has come into personal contact with the suffering and the oppressed; and like some good angel, in many a loathsome slum has, almost literally, “lifted the beggar from the dunghill.” She has given us a good lead, and her achievements go far to prove that the efforts of such sympathetic volunteer workers, if wisely directed and sufficiently extended can, even without State aid, do much to elevate even the poorest, and to bring sweetness and light into their dwellings. But Lord SALISBURY doubts if such an army of volunteers can be obtained. It seems a disgrace to our humanity—a disgrace it certainly is to our Christianity—that there should be any difficulty about it. Is there anything to hinder the godly unity of all Christian churches in the prosecution of such practical beneficence? Surely there is some possible way of getting over the difficulties, sentimental and imaginary, which spring from mere sectarian prejudice, or a jealousy of interference with the arbitrary boundaries of ancient parishes, now for all practical purposes of systematic oversight absolutely useless; so that to each congregation may be allocated a workable portion of the vast field where earnest labourers are so sorely needed. By such means, without any being overburdened, the whole might be covered. It is, perhaps, not too much to say that without the co-operation of such disinterested caretakers, the most stringent laws and the most zealous official supervision will alike prove unavailing.

But the need of more exact information before Parliament or our municipal bodies take further action is really more urgent than even Lord SALISBURY may imagine. There are two ways by which authorities, whether imperial or local, can, and do, with equal certainty retard the amelioration of the working classes. One way is by doing too little, and the other is by doing too much. It has hitherto been too facily assumed that there is only one, namely the first, and the necessity for investigation throwing light upon the second has not been recognised; and yet it is not only easy to imagine an amount of interference which must infallibly lead to an increase of the



difficulties which the poor experience in getting dwellings, or in getting dwellings which they can afford to pay for, but it is a fact, which was brought out at the recent congress of the Sanitary Institute of Great Britain, that in some localities such a mischievous amount of interference actually exists now; and it may perhaps surprise Lord SALISBURY and many others to learn that the provisions of the Police and Health (Scotland) Bill, which was before Parliament last session, and which, no doubt, will again be introduced, would make it impossible for the PEABODY Trust, or any of the improved dwellings companies, to erect one of their excellent blocks of workmen's houses in any town in Scotland. Lord SALISBURY points out that these associations, with their exceptional facilities and experience, and with all their care, have found it impossible to bring down the cost of their dwellings to suit the requirements, the necessities, of the poorest wage-earning classes; and yet Parliament is asked to decree that throughout Scotland, at all events, no dwellings so cheap as theirs shall be erected. It is hardly possible to exaggerate the evil consequences of such a prohibition. What is needed is the regulation, not the annihilation, of private enterprise; unless, indeed, the State is prepared to face the responsibility of itself providing houses for the working classes, not in London only, but everywhere else—an alternative at once unjustifiable and impracticable.

### THE TEMPLE OF DIANA AT EPHEBUS.

THE biblical associations with the temple of the great goddess DIANA of the Ephesians, and of "the image that fell down from JUPITER," have always been lively. There are few pages in history which set before us with such force, and in so few words, the points of contact and conflict between rulers and their subjects, between religious and civil interests, as the short chapter in the Acts describing the tumult raised by the makers of silver shrines, and the lull which ensued upon the mingled conciliation and warning of the address of the "town clerk." The explorations of the site of the tumult by FAULKNER and others, and lastly, of the temple itself by Mr. WOOD, have contributed still further and more distinctly to localise the narrative. It is, therefore, not to be wondered at that the zeal for more complete excavation natural in Mr. WOOD has been responded to so far as to enable him to resume his labours. A committee has agitated the subject not without obtaining support—though more will still be useful—and it is understood that Mr. WOOD is now on his way to ply spade and barrow again as soon as the great heats have subsided. According to STRABO (641) CHERSIPHON was the architect of the first temple of ARTEMIS at Ephesus, which another architect afterwards enlarged—or rather superseded—by a new temple on more extensive plans. After this was burnt by HEROSTRATUS, another still better was built by CHEIROCRATES (or DEINOCRATES) the architect of ALEXANDER THE GREAT, in which the columns of the previous temple were utilised. STRABO was familiar with the temple, and it is safer to rest in his account than to rely on PLINY, who makes CHERSIPHON the architect of the last temple. VITRUVIUS, so far confirmed by STRABO, says that the temple in the Ionic style was first built by CHERSIPHON of GNOSSUS, and his son METAGENES, and that it was afterwards completed by DEMETRIUS and PÆONIUS, of Ephesus. This may suffice as an example of the differences among those whom we have to accept as authorities, and for warning against accepting even their uncontradicted testimony too implicitly. But what we are chiefly concerned with is to note that the succession of these structures on the same site is confirmed by the excavator. Mr. WOOD found that the platform on which the pillars of the last temple stood was  $3\frac{1}{2}$  feet above the highly-polished white marble pavement of its predecessor, which was that burnt by HEROSTRATUS, 356 B.C.; and that this again was four feet above a podium of three steps belonging to the original temple. This was raised only two feet above the level of the court of the peribolus, a level which Mr. WOOD appears to indicate was maintained throughout, so that the platform of the last temple was 9 feet  $5\frac{1}{2}$  inches above it. These discoveries agree with the notice by PHILO that the last temple of all was approached by the unusual number of ten steps, and with the expression of CALLIMACHUS, in his hymn to ARTEMIS, which implies that it was raised upon a peculiarly conspicuous and solid platform.

That the style of architecture was the Ionic, is another

point in which the ancient authorities agree with the recovered remains. It is indicated on coins, and distinctly stated by VITRUVIUS (who is also authority for a double row of columns on the sides), that the temple was octastyle, that is, had eight columns in front. Both these particulars—that it was octastyle and dipteral—are confirmed by the excavations. The coins also exhibit sculpture on the shafts of the columns, as referred to obscurely by PLINY, and finally certified by the noble fragment now in the British Museum. We have, then, the important statement by PLINY, that the *universum templum*, or the temple at large—as we may understand the expression—measured on the full outside plan, was 425 feet long and 220 feet broad. These were probably Greek feet, equivalent to  $430.70 \times 223$  (exactly 222.95) English by the ratio  $1 = 1.0134$ .

The breadth of the front portico from angle to angle of plinths was determined by Mr. WOOD from remains *in situ* as  $163.9\frac{1}{2}$  English. It does not appear that he obtained positive data as to the length and number of columns on the flanks; indeed, for anything he has published, it is clear that his plan as regards these points is purely conjectural. On the other hand, we have a definite statement that he found parts of an extreme lateral step resting upon the level of the courtyard, which gave him a breadth for the entire building on the very lowest step of  $239.4\frac{1}{2}$ . This exceeds PLINY's dimension, and if we are to set aside the possibility of error in his text—original or in transmission—we must assume with Mr. FERGUSSON that his dimension was taken on an inner line, giving a margin of  $8.2\frac{1}{4}$  at each side.

We are left in uncertainty whether Mr. WOOD found any certain data for the dimension  $418.1\frac{1}{2}$  which he gives for the length of this lowest step, or whether it is only inferred by him from an antecedent free assumption as to the number of columns in the flank colonnade. This dimension is not more but less than PLINY's by 12.6 feet, which, to agree with it, should have been 236 Greek feet ( $236.23$ ). If we assume that the breadth given by PLINY should be corrected by Mr. WOOD's measurement, while his length is accepted, we have English  $239.4$  ft. :  $430.7$  ft.; we have a numerical ratio of 5 : 9 nearly—

$$\begin{array}{r} 5 : 9 :: 239.4 : 430.9 \\ \quad \quad \quad 9 \\ 5 \overline{) 2154.6} \\ \underline{430.9} \end{array}$$

Following this forth, we find from the dimensions ascertained by Mr. WOOD that the difference of the breadths of octastyle portico and lowest step is of the podium  $239.4 - 163.9\frac{1}{2} = 75.4\frac{1}{2}$ , giving a margin on each side of  $37.8$ , to be distributed between the platform on which the columns stand and the steps forming the ascent to it. It does not appear on the records that Mr. WOOD found distinct evidence that the margin on front was equal to that on flanks, or as his plan shows it, somewhat broader.

He was enabled, as we have seen, to decide that the height from the courtyard to the level of the plinths of the peristyle was 9 feet 5 inches. This is in perfect accordance with the ancient account that the temple was raised upon a stylobate of ten steps. Mr. WOOD convinced himself that the risers were on an average 8 inches, and the treads 18 or 19 inches, and also that the interval from the edge of the stylobate at the top of the steps to the plinths was 15 feet 3 inches. But we are left in too much uncertainty as to the grounds of these inferences for us to venture to reason upon them. The possibility is open that besides the proper ten steps of the stylobate the temple may have been raised again above the platform by more or fewer steps. The steps, again, may not have been continuous all round the temple; they may have been superseded in parts by a vertical podium—a conclusion arrived at by Mr. FERGUSSON—or else by those degrees of steeper and broader dimensions which, as in the Parthenon, gave dignity and admitted in parts of intermediate steps for convenience.

As regards the number of columns we have the statement of PLINY that they were 127, "made by individual kings, 60 feet in height, thirty-six of them enriched with sculpture, one by SCOPAS." There can be no excuse for interpreting the text, as some have proposed, as if it ran "120, of which seven by kings," &c., as the next clause would then read absurdly that thirty-six out of the seven columns were sculptured. That the entire number were contributed by as many kings is out of the question; the statement may be taken as one of the



exaggerations which are wont to infest accounts of Wonders of the World. But the work was far from finished when, according to STRABO, ALEXANDER offered to defray all future expense of it as well as all past, and the numerous kings who succeeded to his broken-up empire may easily have been animated by his example. It does not appear likely that the columns of the cella are included in the 127. The odd column, however, is a serious difficulty, in addition to that of finding places for so large a number in the ordination of an octastyle temple according to any recorded precedent.

Let us take, in the first instance, the most customary exemplar, and suppose that the temple had on the flanks one more than double the number of columns on the fronts—namely, 17. This rule in an octastyle dipteral temple will be found to give us only 92, and if we add another range of eight columns, to distinguish the eastern front, we have only 100, or 106 if we include the columns of the pronaos and posticum. We are thus left with 21 columns to spare.

This is not the only trouble which is reserved for a restorer who, like Mr. FERGUSSON, accepts the responsibility to make the very best of the best evidence available, as far as it goes. We have the ancient notice that the stylobate or podium of the temple had ten steps. This is the number of those which in the small Ionic temple of the Smintheum, recently published by the Society of Dilettanti, are continued uniformly on all sides, with a total breadth of 12 feet and height of 8. This temple is pseudodipteral, and the spreading basement harmonises with the unusually broad ambulatory. The columns of the peristyle here have their bases close to the margin of the upper step. But the case at Ephesus is very different. If we take Mr. WOOD's measurement of the steps found as applicable to all, and assume with him that, as at the Smintheum, they were unchanged and uninterrupted for the entire circuit of the temple, the nine treads of ten steps up to the platform would give a total breadth of 14 feet 3 inches (19 inches by 9 = 14 feet 3 inches), to be deducted from 37 feet 5 inches, the full margin on plan from the bases of the peristyle, and giving 23 feet 2 inches for the upper platform.

The measurement of the risers of the steps found is given by Mr. WOOD as about 8 inches, and the total height for the ten would therefore be about 7 feet at the utmost. But the height from the courtyard pavement to the bases of the columns is given as 9 feet 6 inches, and we have therefore a height of 2 feet 6 inches to spare. There is a choice of expedients for disposing of this difference. The risers of the steps may possibly not have been all uniform, yet this is exceedingly unlikely. It was consistent with the solid Doric style of the Parthenon to obtain dignity by the so-called three steps forming the basement, to have risers exceeding  $1\frac{1}{2}$  feet high, and so admitting occasional intermediate blocks for convenience of ascent. But such proportions would not harmonise with an Ionic building of any scale; and if ever they could be admitted, it would have surely been in the very lowest steps of all, which were precisely those that are found of the moderate dimensions.

A more plausible conjecture is that the spare dimension of 2 feet 6 inches is to be assigned to three steps from the upper platform to the colonnade. Mr. WOOD found the base of one column of the outer row on flank *in situ*, but we have no definite account of how far the substruction or adjacent remains were or were not consistent with the plinth being set upon the level of the general platform or at the edge of a step, or of any indications existing to determine the height of this upper platform above the court or peribolus pavement. The present assumption would have one advantage of considerable value: it would give additional elevation to the sculptured lower drums of the columns, which seems urgently required. It is not easy to believe that the architect of a temple on which the best Greek art of the day was to be lavished would rest in a design which destroyed all its effect for visitors and spectators from the very court and sacred precinct of the temple itself. Yet this must surely have been the result if they were to look up at a façade of which the bases of the columns were not only 10 feet above their level, but set back 23 feet from the margin of the supporting platform.

A third solution, or at least alleviation, of this difficulty has been ingeniously, if we should not rather say sagaciously, hit upon by Mr. FERGUSSON. It certainly goes some way to happily harmonise the fragmentary ruins and the ancient descriptions with artistic requirements. By this theory it is assumed that the breadth was reduced from Mr. WOOD's 239 feet to the

220 Greek feet of PLINY, by deduction of the breadth of the two lower steps of the original building, and a broader berm above them. The ten steps of PHILO, starting from this berm, would finish nearer to the bases of the pillars of the portico, which, especially if raised upon their conjectured subsidiary stylobate, would be much more favourably within view. Mr. FERGUSSON does not continue these steps to the full extent of the front. He considers that the solid basement was finished at intermediate spaces all round by a vertical face. There are analogies in other monuments of Asia Minor which point to this, and the recent discovery of the sculptures which enriched the enormous altar at Pergamus suggests how these piers and surfaces were likely to be made available by the sculptors.

The next variation from the restoration set forth by Mr. WOOD is to renounce his conjectural length of the temple in favour of the larger dimension given by PLINY—430 English feet instead of 418. This gives the enlarged platform, which is absolutely requisite unless we are to set aside the number of columns, 127, recorded by PLINY in favour of some purely conjectural smaller number. Here comes into consideration the peculiar spacing of the columns of the east front. The antæ of the pronaos, of which the positions were found, must have ranged in line with fronting columns; but the ascertained width of the pronaos proves that the intermediate pair of columns must have been much more widely spaced than the others, which corresponded with the spacing of the peristyle. The three central architraves, if equal, must have measured at least 25 feet. It therefore appears that the coins truly represent, only with inevitable exaggeration, an abnormal central spacing, of which it is known that the temple at Sardis—of which we may one day hope to know more—exhibited another example. The precise dimensions on Mr. WOOD's plan are conjectural; but there is little doubt that, as at Sardis, the central columniation was the widest of the three. It may probably have required an architrave over 28 feet. This inconveniently wide span was adopted with a view to give dignity to the entrance to the cella; but no such motive constrained the adoption of like extravagant spacing at the rear of the temple. Here, accordingly, Mr. FERGUSSON—boldly enough, no doubt, but fairly and happily—conjectures that there were nine columns spaced uniformly, but still in the three ranks which he assigns to the chief front. He extends the colonnade westward to within some 10 feet of the space at command, and thus accounts for the full and the odd number of the 127 columns. His distribution of the thirty-six sculptured columns between the two fronts may be accepted as at least as probable as any scheme which has been hitherto propounded, or more so. One possibility is not adverted to; it is that the tale of columns intended to be so enriched may never have been completed, but remained open to extension as benefactions accrued. If this were so we need not trouble ourselves to seek for a symmetrical form of distribution that would accommodate the exact number.

One word in conclusion. It is very much to be desired that in the renewed excavations of which we have promise, attention will be devoted as earnestly to the recovery of authentic details of the plan and construction and design of the temple as to the unearthing of fragments of sculpture worthy or unworthy of being transported to the national museum. Curators of museums may be excused for being chiefly concerned to further the acquisition of specimens which can be exhibited, to have something to show. The more reason is there that others should insist on explorers taking to heart the duty of saving from destruction and oblivion what memorials may remain of architectural history and architectural genius. That Mr. WOOD has not published the detailed authoritative measurements which he had an opportunity of making, does not justify the inference that he failed to make and record them; but at least it justifies the expression of a hope that the duty of making and of publishing them too will be well kept in mind. Lovers of Greek architecture and students of its history have their reasons for apprehension. The galleries of the Museum are rich in statues and busts and reliefs from Cyrene—from Cyrene where Hellenic arts and architecture were already flourishing before the age of PERICLES, but not one detail of the architecture of the temples has been put on record by the explorers who turned over the ruins to obtain transportable relics. LUCIUS MUMMIUS was quite content to leave Corinth a mass of ruins provided he could collect from them productions of art sufficient to make a show at his triumph; and the tendency of



collection in this spirit appeared in his warning to the contractors for the transport of his spoil in works of genius to Rome, that he would hold them bound to replace any they might lose or damage.

### PARIS NOTES.

THE unveiling of Alexandre Dumas' statue on Sunday last was made the occasion of an extremely imposing ceremony. This worthy monument to the memory of the great writer was the last work of Gustave Doré, and the spot selected for its erection—the wide space on the Boulevard Malesherbes, where it branches off into the Avenue de Villiers—is one of the most advantageous that could have been chosen. The Place itself was crowded by a large assemblage of the general public. On a platform, heavily draped with crimson cloth and gold fringe, were gathered the speakers, the friends of the late author, and all the notabilities of art, literature, and the drama now present in Paris. The space reserved for the more privileged assistants at the ceremony was also thronged, and the whole enclosure of the site, formerly known as the Place de Villiers, now renamed Malesherbes, was kept by the cavalry of the Republican Guard and a numerous body of police. Dumas is represented as seated, the head raised with a radiant expression upon the features, which appear lighted up by a passing idea, whilst the right hand holds the pen, as if about to impart the thought to the manuscript on his left knee. The statue, though of heroic size, is somewhat dwarfed by the height of the pedestal, which about half-way up is further weighted with three figures. A young woman is represented in the centre of the group, reading one of the works of the novelist, whilst a youth follows her on the page; the other figure on the right is a brawny workman, his eyes fixed on space, and eagerly listening to the recital of the adventures of the hero of the tale. On the three other faces of the pedestal are inscribed the titles of the prolific author's principal works. Behind is a figure of the Chevalier D'Artagnan. M. Edmond About spoke very feelingly and effectively on behalf of the literary body; M. Jules Claretie for the Society of Dramatic Authors, of which he is vice-president; M. de Leuven, as president of the committee entrusted with the erection of the monument; M. Kaempfen, Director of Fine Arts, on behalf of the Government; and M. Halanzier, as president of the Artists' Society. The ceremony was almost as much a demonstration of respect for the memory of Gustave Doré, the sculptor, as for that of Dumas.

From some figures lately published by the authorities of the Jardin des Plantes, that pleasant resort—a mixture of our Kew and Zoological Gardens—would appear to be considerably frequented by members of the art world—painters, sculptors, and designers—bent not upon pleasure, but upon finding models. During the year 1882 no less than 176 free passes were issued by the Horticultural Department to artists, trade designers, and makers of artificial flowers; while 255 similar cards were given to enter the portion of the gardens containing the living animals.

A most interesting exhibition was opened on Tuesday by a *soirée* given by the Association Artistique pour la Décoration des Tissus, at the Salle Georges Petit, in the rooms lately occupied by the Exposition des Cent Chefs-d'Œuvre. The exhibition has been organised with the laudable motive of assisting the Society for Succour to the Wounded of the French Army and Navy. On entering the spacious and richly-furnished hall in which the various specimens of painting as applied to textile fabrics of every kind are displayed, the first impression of the visitor is that a mistake has been made, and that he has been brought to see some choice examples of needle and old tapestry work. In fact, a very minute examination is required to determine and realise the nature of the decorative agency, so admirably is the illusion carried out. On every kind of woven material the painter has imitated the various styles of ancient and modern needlework—the coarse embroidery and patchwork of Bayeux tapestry, the laborious worsted of Gobelins and Flemish hangings, contrasted with the fine silk stitch and elaborate braiding of Eastern curtains and screens. The deception is complete, whether the brush has copied the needle on cloth of gold, silk, velvet, cloth, or rough canvas. The subjects illustrated by this novel and clever process are as varied as the materials on which they are delineated, and the exhibition is altogether noteworthy for its evidence of artistic skill and pictorial effort.

Some interesting experiments took place on Saturday last in

one of the inner courts of the Grand Opéra, for the purpose of trying an invention by M. Gaspard Meyer, for preventing fires and accidents from burning in theatres. Among those interested in the subject who were present, were M. Vaucorbeil, director, and M. Garnier architect of the Opéra; M. Camescasse, Prefect of Police; the chief of the Paris Fire Brigade; and several theatrical managers. The invention is intended to anticipate fires by rendering the material used in theatres—the scenery and hangings, by which the flames spread with such rapidity, and the gauze dresses of the ballet-dancers, the source of frequent accidents—absolutely unflammable. The experiments made were a complete success. Several light deal frames filled with painted paper, canvas treated with M. Meyer's composition, after being exposed for more than an hour to a fierce fire and gas, the flames of which licked the surface, came intact out of this severe ordeal, the paper and canvas being neither cracked nor broken, excepting where spectators had run their sticks through it to ascertain the effects of the heat, and even the fibre was found to present a certain resistance. The frames themselves were covered with the prepared paper, and also stood the test perfectly. Under a great heat it was found that the wood might become reduced to a state of charcoal, but could not burst into flame, owing to the presence of the prepared envelope. By mixing the substance with the paint used, the colour of which is unimpaired, M. Meyer claims that the whole woodwork of a theatre may be rendered unflammable. The applications of the invention are, of course, manifold, and are a mere matter of detail for the stage-machinist, now that it is proposed to render wood and drapery absolutely proof against fire and flame. From the terms of approval expressed by MM. Vaucorbeil and Garnier it is probable that the invention will be adopted at the Opéra; and the Prefect of Police would perform one of the most useful acts of his administrative career in prevailing upon the other Paris theatres to follow the example. After the success of these experiments it is very probable that, before long, similar trials will be given in London.

### MR. HERKOMER ON ART TEACHING.

AN address was delivered by Mr. Herkomer, A.R.A., at the opening *soirée* of the Nottingham Arts Society. In the course of it Mr. Herkomer said that, according to a French writer, a work of art was "a corner of creation seen through temperament." There was no doubt that the reproducer of art work was a reproducer of the corners of creation, as influenced by temperament, and, consciously or unconsciously, every artist imparted to his picture his own feelings. The question with which the art world had chiefly to deal was what was the best way in which to regard nature, and in whom the originality of the artist might best be brought out. There could be no doubt that a strong man who gathered strength and persevered in his study might well be left alone; but, in spite of that, he (the speaker) would fain see a return to the old custom of mediæval Germany, and have the "meister" back again; but the student of to-day scorned the thought of apprenticeship, and wished to leap into artistic merit at one bound. The number of students at the present time had enormously increased, owing to the facility with which the child of every artisan who could scribble might be sent to an art school, where his scribbling could be directed into some system; but in former times the art of tuition was rare, difficult of procuring and expensive, consequently the number of students was comparatively small. The speaker then alluded to the various systems of teaching, and pointed out the danger which arose from the student imitating his master's works, and he insisted on the necessity of every student following the bent of his own individual idiosyncrasy. The student should know with what works his own temperament was in harmony. They had seen the result of the neglect of careful consideration of this matter by the loss of individuality which had so often taken place, the originality of the student being swallowed up in the art of the tutor. The question of the art of tuition was a most difficult one, for to teach willingly was to give the efforts of years of study in one moment; there was much of love and tenderness in it. But it did not follow that the greatest artists must of necessity be the best teachers; the greatest men had achieved greatness from the power within and not from the power without. There were men who had never made a position in art who had at the same time secured great success as teachers, and it was rather a constant watchfulness than a strong personal influence which was needed to direct the artistic mind. History showed that the great souls had often to shake off the opinions which their teachers had left on them before they could create the works which had made them immortal. The speaker then touched on the question of originality, and asked why that quality should not be held up to the student as a thing to be aimed at; but, on



the contrary, the master was often too apt to force the students into an imitation of his own art. To guard against that danger the master ought to wait until he found out with which his pupil was most in harmony, and then direct his energies to them. It might be asked what was to be done with the mediocrities who formed the bulk of the students of the present day. He could only say they belonged to the evils of the world which had to be borne, and which added to the friction of life. The speaker then adverted to the distinct types of art exhibited in conventionality and originality. It was an interesting question as to how far the painter was bound to be conventional in order to produce comprehensive works. What they wanted was an interpretation of nature, and in this, while they were bound to preserve a certain extent of conventionality in conforming to certain recognised rules, yet originality was none the less necessary, and the great artist was he whose privilege it was to read the secret that nature possesses, and make it intelligible to his less gifted fellow-men. The happy medium in an artist was a strict admixture of conventionality with originality, for when the latter was altogether unqualified it sooner or later degenerated into a feverish eccentricity, and then the end was not far off. They should take this, and note as a grand truth that all the great master minds had their art most perfectly under control. The speaker then illustrated his remarks on this subject by describing the works of thoughtful subject painters and of "bit" painters, the pictures of the latter never appealing to the heart as the former did. Mr. Herkomer then contrasted the arts of etching and engraving, and said that although the followers of the former art were more numerous than the engravers, fewer painters ever being found able to engrave their works than were found able to etch them, yet engraving was a source of greater artistic pleasure than etching. He thought that the art of engraving might very well be extended and encouraged by painters. The speaker then touched on the influences of art on the surroundings of daily life, and said that though there had been of late a revival of art furniture, still he was sorry to say that they had not yet got any further than the reign of Queen Anne. After touching on the qualifications needed in portrait painting, Mr. Herkomer said that no matter what branch of art, or what course of tuition the student might follow, if he looked for the best in nature he would easily recognise the best in art, and when the best things only in art were wanted, then and then only would they have the best power and creations of the artist.

#### MODERN LIFE IN MODERN ART.

A LECTURE on "Modern Life in Modern Art" was delivered on Monday by Mr. F. Wedmore at the Manchester Town Hall. After stating that he did not feel any hesitation in dealing with such a subject in Manchester, Mr. Wedmore asked, What are the claims of modern life, so much of which is ugly, to be treated in modern art, so much of which ought to be beautiful? What had art to record now if it neglected modern life, and what could be the place of art in English life if it turned from the story of that life in indifference or contempt? A painter could not arrest the changes wrought by time, not upon the work itself, but upon the minds that had to understand it; all he could do was to adapt his art to the newer conditions and to the new minds. In so doing there was much his art must leave behind. It was pretty generally conceded it must leave behind the painting of religious subjects. With certain notable exceptions the paintings that were directly and in an accepted sense religious were not those which had impressed our generation most strongly. The themes of such works were hackneyed, and what we wanted from art was freshness. A few exceptional men, poets of the studio, such as Burne-Jones, Rossetti, Mr. Watts, and now and then Mr. Poynter, had endowed ancient fancies with new life, and had shown that the realms of allegorical and classical mythology had yet something to yield. Of historical painting, with its often artificial dignity and erroneous pride, a style of painting in which the archaeologists counted for more than the artist, our private galleries now showed but little trace. A mere theatric revival of the past was no longer held in the highest esteem by our younger painters or thinkers who looked at life freshly; and such revival could only be ignored by that "severe to-morrow" which would ask us what we had of our own in the art of 1883. What did the audience think was the historical painting of the present time? It seemed to him that it was to be found in a record of the characteristics of English life—a record of its labour, its pleasure, and its principal personages. He found it perhaps most of all in the noble portraiture of Millais. So great a period in portraiture had only once before been vouchsafed to the English school. Sometimes in the world of imagination the achievements of the past might become a terrible burden to the creative mind, which cried out for freshness and liberty. Perhaps at the present moment, when in artistic circles there was so much pitiable discouragement of the characteristics of the age in which we live, one of the best lessons to be learnt was this, that the art of the past accepted its own time. One half of our poets and painters did not know the Muse when they met her; they remained in an

attic and sighed in vain for a goddess to drop from the sky. It was said that contemporary life was so ugly that a poetical man could not endure it. But one of the most poetical men who had ever manifested himself in English art, Turner, soon after the opening up of railways, painted *Rain, Steam, and Speed*, which was drawn from scenes presented by the Great Western Railway. And that was not a solitary picture of the kind, for Turner also painted the fires of the Black Country, the mill chimneys of Leeds, as well as pictures of Margate and Brighton. And as if the more to confound the artist who wanted to get away from life under modern conditions, Turner put into the forefront of his picture of Brighton the new pier, while the tower that rose into the sky at the background of Margate was not a venerable ruin, or even the tower of the parish church, but was the tower connected with the Margate waterworks. We were too much influenced in art, as to what we liked or disliked, by the tradition of association. We ought to be content to be influenced by our own associations, and not by the associations of our great grandfathers; and scenes based upon our own associations must, if we had any sympathy with modern life, be brought into modern art. If an artist recorded such outward aspects of English life as his draughtsmanship could seize, he discharged appropriate service, for he taught others to see that which he portrayed by his art. It was the constant struggle of the artistic man to reduce the number of those who had eyes but saw not. Pictorial art must be content to belong to its own time, and that artist would be most in sympathy with the thought of to-day, who, instead of sighing for that which had gone by, should be content with things around him, and who should hold that no century, take it altogether, was likely to be better for richness and variety of human life than the nineteenth century, except the twentieth.

#### THE VIKING'S TOMB, TAPLOW.

IN front of Taplow Court, near Maidenhead, on the Thames, at the angle of the hill, the slopes still bear the name of the "Bury Fields," showing that there the British Celts had their *beorh*, or fortified hill-top, and, says a correspondent of the *Times*, the rich dark soil contains fragments of pottery and artificially-formed flakes of flint. When the ancient Norman church that once stood there was removed to its present more central position in the village, the traces of the old ditch and *vallum* which formed this British stronghold were exposed. The very pond which, just below it, formed its only source of water supply, is said by local tradition to have been that in which heathen Saxons were baptised by St. Berinus. The very name of the village itself goes back into early history. Taplow, or Tap-hlewe, is but the "Mound on the hill-top," and in the heart of the old Norman churchyard the mound still stands. It was an old occupation-site, and possibly a holy one, in the earliest days. Celt and Romano-Briton certainly lived there; and early Christendom consequently placed its church there. Such survivals are common. Puttenham Church, on the slopes of the Hog's Back, near Guildford, stands on a Celtic burial-place; and the great temple of Avebury, in Wiltshire, now contains within its precincts the Christian Church of St. James. Pope Gregory rightly recognised the value of old associations when he directed the missionaries he sent to the far-off land of Britain not to destroy British temples or holy places, "so that while the nation sees that these very same fanes belonging to it are not destroyed, it may sincerely renounce its error, and, discovering and adoring the true God, the inhabitants may assemble together within places which they have been usually accustomed to frequent." The old Norse Viking who, using the silent highway of the Thames in search of plunder, must have died down by Maidenhead, hence found his resting-place here. On the commanding height overlooking the shallows where his ship was beached, his men found a place lofty enough for their leader, and rich even then in memories; and so, with many a wild chant, he and his treasures were placed beneath the "hlewe" of Taplow, to remain even until now. They raised a tomb worthy of their leader and his wealth. The mound is 240 feet in circumference and about 15 feet high, and on its summit are the dead remains of an ancient yew-tree, whose knotted trunk is nearly 6 feet thick, and whose age may certainly be estimated at possibly 600 years.

All archaeologists must feel that they owe a debt of gratitude to Mr. Grenfell, lord of the manor of Taplow, and to the Rev. Mr. Whateley, vicar of the parish, for their freely-accorded permission to ascertain the real meaning of the ancient mound; and still more to Mr. J. Rutland, secretary of the Berks Archaeological Society, for personally undertaking the laborious task of superintending and carrying out the excavation. It was felt very desirable to disturb the form and character of the tumulus as little as possible, so that it might be eventually restored to its former external condition; and, irrespective of the enormous weight of the old yew tree, which rendered its removal extremely difficult, it was decided that, if possible, it should remain undisturbed. But the results have very fully repaid the care taken, and probably no richer or more instructive discovery has been made in the south of England than that which is now in progress. A line having been



traced due north and south on the surface, a cutting 6 feet wide was made about 4 feet above the ground level on the south side of the mound until it reached the foot of the tree, and thence a shaft was sunk downward and underneath the root, and united with a second vertical shaft sunk on its north side. The earth material throughout the whole of the excavation was very loose and friable, and showed traces of the way in which it had been piled up. It was composed of the natural red sandy gravel of the surface, mixed and intercalated with black earthy matter; and throughout it contained fragments of bones and teeth of horse, pig, and ox, and broken pieces of British and Romano-British pottery. One fragment of Samian ware, at a depth of 16 feet, showed that Roman vessels had been brought there, and some pieces of coarse brown ware had their surface pinched up into rough knobs similar to those designated "grape cups" by Sir Richard Colt Hoare in his "History of Wiltshire." Flakes of flint and used "scrapers" were also numerous, but there was no decidedly human bones. All this pointed but to one conclusion—that whatever the tumulus was erected for, it was *post-Roman*.

At about 20 feet from the top of the barrow its sepulchral character became at last clear. In the dark brown earth were uncovered lines of gold, and these, on being carefully removed, proved to be the remains of gold fringe, about an inch wide. They lay as if forming the edge of a garment extending diagonally downward from the shoulder across the body. But all doubt as to the nature of the interment was set at rest by finding close to this a magnificent gold fibula, weighing about 4 ounces. In length about 4 inches, as rich in colour as if just manufactured, enamelled and most richly chased with Scandinavian ornamentation, it seemed to have suffered little by its long entombment. Just below it was the owner's iron sword, heavily rusted in the sheath, and so friable as to break into fragments when it was removed; and near to this latter were two other gold fibulæ, smaller in size than the shoulder brooch, but equally beautiful, in one of which was a fragment of stamped leather. From the impression in a fragment of decayed wood which enclosed this, it seemed as if the upper garment had been composed of woven woollen fibre, gathered round the waist by a leather belt fastened by two buckles, and over all an upper gold-fringed cloak or tunic, fastened on the shoulder by the heavy brooch of gold. On the right of the sword were the remains of an iron knife, probably the "sceax." There were scarcely any traces of bone. The scarce fragments were very friable and broken; but from the presence of numerous decayed fragments it seemed as if the entire body, clad in its royal robes, had been covered over by broad planks of wood. Over the middle of the interment was a large pile of archaeological treasure. Underneath was the heavy wood-lined and bronze-plated circular shield, resting on which were two drinking-horns, the small ends of which were encased in gilded bronze, and the mouths encircled by embossed rings of silver. Remains of armillæ, or bracelets, silver-rimmed and of bronze, with deeply serrated edges, lay near; and on the north-west side of the shield were the relics of a wooden bucket, encased with richly-stamped bronze. Mingled with these were the fragments of at least two vessels of thin, greenish glass, ornamented with parallel horizontal lines, similar to modern "Venetian" glass, and decorated with broad, projecting spikes of glass. Such vessels are known to be of Saxon times. Mr. Llewellyn Jewett pictures them, and their forms are well known; but the fragments of these at Taplow certainly show a larger and richer variety than those which have been hitherto found. The largest was certainly 4 inches wide at the mouth and 11 inches high. There was yet another vase of a similar character close to the large gold fibula; but all these were in fragments, and so friable were the remains that it was impossible, even with the utmost care, to remove them other than piecemeal. It is probable, too, that, judging from the number of the bronze and iron fragments, some of them may be found to form portions of a helmet or of body armour; but this is at present merely conjecture. Over the wooden plank that undoubtedly protected these relics—for it was found completely enclosing and covering them—was placed the spear, which in this case had the point towards the west, and, moreover, had a barbed point, with a very long iron socket. As at present so few fragments of bone have been found, it is almost impossible to define accurately the race to whom the "mighty dead" belonged, or the date of the interment. Apparently the body lay a little south of east and north of west, with the head towards the east; and that the decorations are Scandinavian admits of little doubt. From the presence of so much treasure, under so great a mound of earth, its owner must have been a man of note. From the bronze bucket, which was used in Saxon ships of war, he probably was one of those hardy pirates who ravaged the coasts and rivers of Britain when the Romans had deserted them. And, lastly, he was a pagan—a Viking of the northern seas, possibly, who left his Scandinavian home some thirteen hundred years ago. He was brought up from the pleasant river valley on the shoulders of his men, and buried on the site of the old Celtic village, amid the wild chants of his brave sea-dogs, and, as became him, after *was-hal* to his memory. There is much to be learnt from the discovery, as well as interesting relics to be treasured. Gold ornaments of exquisite workmanship are placed with bronze armour and with iron arms. The

under side of the shield was strengthened with a ring of iron, as was also the bottom of the bucket. With gold for decoration, bronze for defence, and iron for offence, the discovery affords another and most satisfactory proof of how difficult it is to distinguish between, or argue dogmatically about, definite "ages of bronze and iron." Whoever the chieftain was, he lived on the borderland between the two.

The excavation has already taken many days, and is not yet completed. The nature of the soil renders the shoring it up essential for the safety of the workman; and even now, with all the care that has been taken, the ancient yew-tree has sunk into the shaft. But the labour has been well repaid by the richness and variety of the discovery so far, even if no other treasures reward Mr. Rutland's labours. He has had the valuable advice and assistance of Dr. J. Stevens (of Reading) and of Mr. W. Money, F.S.A. (of Newbury), in the excavation; and large numbers of persons, including their Graces the Duke and Duchess of Westminster, from Cliveden, have inspected the very valuable and interesting relics. It is impossible at present to do other than theorise on the date of the interment. The facts of the discovery give food for theories. Only careful examination can furnish hypotheses. But, so far, all things tend to the belief that the remains are Norse or Scandinavian. From the quantity of bronze armour, it would point to an early date when that metal was more commonly used for defensive purposes than iron. The later Anglo-Saxon was more of an iron-using man, and his armour of metal plates or rings, sewed on a leather or woollen fabric, resembled in character that of the Norman soldiers of William. Certainly he must have belonged to that great Northern Teutonic race of which the Danes, the Saxons, the Angles, and the Normans themselves were all offshoots. The decoration of the gold fibulæ is certainly Scandinavian, and the bronze bucket may well be that of a Norseman's ship of war. Even the barbed spear partakes rather of the nature of a harpoon than of a javelin; and its position, with the point towards the feet of the dead, is singular. So complete an example of the method of interment of these early invaders of Britain has probably never been found in the southern counties of England. It will be interesting to see what conclusion Mr. Rutland and those who are working with him will come to as soon as they have found time to arrange and place in order the mass of relics that has been so strangely brought to light.

#### RESTORATION OF CHURCHES.

THE following report on the proposed restoration of the church of St. John and St. Alkmund, Shrewsbury has been addressed to the vicar by the Society for the Protection of Ancient Buildings:—

Repairing a mediæval building without destroying any of its interest is, however, a difficult task, even when there is the strongest desire by those in authority to have the work carried out in a thoroughly conservative spirit. The committee therefore think that they will probably be rendering you the greatest assistance in their power by making a report on the building, according to their usual custom, on the chance that by so doing they may throw fresh light upon the good work which you have in hand.

The first part of the building which calls for attention is the upper part of the tower. On the south side there is a somewhat serious crack. This crack is clearly not due to the foundations having given way, for it does not show itself until above the bottom stage. The walls of the tower are of unusual thickness, being 6 feet thick, and they would seem to be well built. Before repairing this crack, therefore, it would be well if possible to ascertain its origin, and the committee suggest that the hanging of the bells should be carefully examined. If any of the upper timbers of the bell-cage run into the wall, or touch it, the bells should on no account be rung until the cage has been so arranged that there is a clear space all round it. Only the timbers of the floor upon which the cage stands should be permitted to rest on the wall. Care should be taken not to destroy the old tie-beam which has been used to form the bell-cage, as it is an interesting evidence of a previous roof of the church.

One or more iron tie-rods should be placed along the inside of the south wall of the tower, and should run through the east and west walls, and be secured to an S piece on the outer face. The rods should have union screws (inside the tower) by which they could be made "taut." A strong bonding-stone might be let into the wall across the crack about every 6 feet in height, and liquid cement and sand should be poured into the crack at several points on the way up, beginning at the lowest, the surface being covered with clay so as to prevent it from running out. Water should be poured in before the cement and sand, so as to clear the way and wash away all dust. The west wall of the south aisle of the nave has cracked and needs repair. An open drain should be formed all round the church 6 inches below the level of the floor. The drain, whether formed of brick or stone, should be bedded on concrete.

The lead-work of the nave and north aisle roofs is in much too bad a condition to repair, and it should therefore be taken off, recast, and relaid in narrow widths and short lengths. The com-



mittee recommend that no more of each roof should be uncovered at a time than can be properly protected by tarpaulin. When the lead is removed, the timbers, especially the wall-plates, should be carefully examined, and such parts as are decayed should be replaced with sound oak, properly spliced, and, if necessary, bound with iron to the old work. A great effort should, however, be made to preserve all the timber of the nave roof which can be seen from the interior of the church after the removal of the plaster ceiling, which latter should certainly be taken away. Rather than remove any of the old oak in this part of the roof, it would be better, in the opinion of the committee, should it prove to be decayed, to back it with new oak and strap it up with iron.

Thoughtful people feel that age of itself gives a dignity to any building, more particularly a church, and therefore the question of how your parish church can be repaired for longer use without modernising its appearance should be always before those entrusted with the direction of any work of repair. The committee would therefore advise that the parapet on the south side of the nave, which is all of wrought stone well weathered, and by no means unsightly, should be permitted to remain.

It is reported that there are signs of a niche for a sanctus-bell having once existed on the east gable of the nave. The committee consider that the right way of treating this will be to put a plain apex stone and coping upon the gable, and, if possible, leave whatever remains there are of a niche for the sanctus-bell exposed to view. No attempt should be made to put a new bell-cot in the place where the old one might have stood. One of the main objects of this society is to call attention to the importance of repairing, or, if necessary, adding to our buildings in such a manner as in no way to destroy their history. The addition of such a part to the church could only be misleading. The date of all architectural work (previous to the Gothic revival), if not restored, can be fairly accurately determined; and we should strive to make the date of work done by us equally clear to future generations, for it must be remembered that buildings are admitted by historians to be one of the most valuable and trustworthy evidences of history.

Before the lead is relaid on the roof of the north aisle of nave, the timbers should be examined and repaired, as in the case of the nave roof. If it is found that the timbers are wrought, thus proving that it was always exposed to view, the plaster might be removed. The roof of the south aisle of nave, which is covered with thin purple slates, is probably modern. If, upon removing the plaster for examination it is found to be of oak and in good repair, it would be wise to leave it as at present, but if it is of deal, it would be well to replace it by an oak roof of simple design, covered with cast lead. The same remarks which have been made upon the nave and aisle roofs may be applied to the chancel roof, excepting that the chancel roof, unlike the south aisle roof, is covered with grey slates and is of a good pitch. It would be therefore unnecessary to cover it with lead.

The porch on the south side of the nave, although comparatively modern and devoid of architectural features, should not be removed, as it helps to keep the weather from the door, and is simple and unobtrusive.

The present seating is probably found inconvenient, and might be replaced by new seating. As a large portion of the present seating is of oak, the committee suggest that it should be placed against the walls of the church as panelling. The committee also suggest that the new seating should be of an original and simple design and not imitative of any mediæval work; and they trust that oak only will be used for this work and for any new woodwork which may be required.

The two chantries, formed by screens at the east end of the north and south aisles of nave, should on no account be done away with. Although they are no longer needed for the services of the church, they are historically interesting, and the screens forming the chantries are beautiful and original work. If the number of sittings provided in the church is of importance, new benches might be arranged within the chantries without interfering with the screens.

The committee would be sorry to see the gallery at the west end of the nave removed, although it might perhaps be reduced in projection. The pillars which support the gallery have richly carved capitals, and the two wrought iron brackets are particularly pretty.

The magnificent oak chancel screen can hardly be touched without loss of interest, and the committee feel that, when all things are considered, it would be wisest to leave it as it is with the Jacobean pulpit, which is well placed, standing against it. At first sight it might seem desirable to insert new muntins to the screen, but they clearly could not add to the interest of the screen, and therefore should be omitted. It would be well if the paint could be removed from this screen and also from the chantry screens. If this is done, great care should be taken to ascertain if there is any mediæval decoration (under the paint) which can now be seen. If this should be so, the paint should most certainly not be removed, unless it can be done without destroying the mediæval decoration, as some method might be found, at a future date, of exposing the mediæval work without destroying it. If there is no mediæval work underneath, the whole might be

removed without destroying the woodwork, which is very fragile, by using Hayhoe's paint solvent, to be obtained of Hayhoe & Co., Stowmarket.

The old oak communion-table and rail will, of course, both be retained. It is often found that these late communion-tables are too short for present requirements. This, however, can easily be obviated by placing a new oak slab of the required length on the top of the table. With regard to the paving of the church, the committee consider that it would be best to repair and make good the present stone paving, which is completely in harmony with this mediæval building. Care should be taken that none of the glass in the windows is destroyed, as it is of much better quality than any modern glass. The walls should be brushed down, and covered with a wash composed of pure whitening and a little size. None of the plaster should be removed, as there may be mediæval decoration under the many coats of old whitewash. The royal arms, escutcheons, &c., should on no account be removed, as they are interesting, and help to furnish and give colour to the building.

## SOCIETY OF ARTS.

THE one hundred and thirtieth session of the Society of Arts will commence on the 21st inst. with an opening address from Sir William Siemens, the chairman of the society's council. Previous to Christmas there will be four ordinary meetings, in addition to the opening meeting, and for these the following arrangements have been made: November 28, A. J. R. Trendell, "The International Fisheries Exhibition of 1883;" December 5, Thomas T. P. Bruce Warren, "The Manufacture of Mineral Waters;" December 12, Thomas Fletcher, F.C.S., "Coal Gas as a Labour-saving Agent in Mechanical Trades;" December 19, W. H. Preece, F.R.S., "The Progress of Electric Lighting." There will be six courses of lectures delivered during the session, under the bequest of Dr. Cantor. These will be: (1) "The Scientific Basis of Cookery," by W. Mattieu Williams, F.C.S.; (2) "Recent Improvements in Photo-Mechanical Printing Methods," by Thomas Bolas, F.C.S.; (3) "London Houses," by Robert W. Edis, F.S.A.; (4) "The Alloys used for Coinage," by Professor W. Chandler Roberts, F.R.S., Chemist of the Royal Mint; (5) "Some New Optical Instruments and Arrangements," by J. Norman Lockyer, F.R.S., F.R.A.S.; and (6) "Fermentation and Distillation," by Professor W. Noel Hartley, F.C.S. The usual short course of juvenile lectures will be delivered during the Christmas holidays. The subject will be "Crystals and Crystallisation," and the lecturer Mr. J. M. Thomson, of King's College, London.

## WATT'S ROOM AT HEATHFIELD.

A PAPER by Mr. E. A. Cowper was read at the meeting of the Institution of Mechanical Engineers, in which the "Watt Room" at Heathfield Hall was described. The room, it was stated, was about 20 feet by 16 feet 6 inches in size, and really was a good attic and nothing more, with one low long window only 5 feet 4 inches from the top to the floor, so that it was a bad light for any machine a few feet from the window; and it was a wonder that Mr. Watt did not devote a better room to his purposes. There were numerous shelves with drugs and parcels on them, and nests of small drawers with tools in them—some very excellent tools. Watt's small lathe and bench stood at the window, with his tools about, and his old leather apron on the vice, and his centre-punch tied with a piece of catgut to the vice, to save him the trouble of looking for it, or picking it up. There were now a number of busts on a bench in the room, and some marble and alabaster for working on. At the fireplace there was his old frying-pan and his Dutch oven or "hastener"; and outside the door, on the landing, a little shelf, on which, it was presumed, his meals were placed. Besides those things there were two large machines for sculpturing marble, alabaster, or wood, and a few smaller half-finished models, such as the semi-rotary engine and a "counter," of which a print was in the hands of the members, for counting and recording the number of strokes that an engine made. In the room Mr. Cowper also found a large number of little slips of copying paper, with various recipes for making copying-ink, and in one corner of the room a small "letter-copying screw press." Many of the drugs on the shelves were for the purpose of making "the copying-ink powders" that Watt used to sell at ninepence a packet, and of which there were now some dozens at Heathfield Hall. Mention having been made of the sculpturing machines, Mr. Cowper, in conclusion, drew attention to the general effects produced by the inventions of James Watt.

Mr. S. Timmins hoped the relics of James Watt's genius might long be preserved. A few years ago they nearly passed into the possession of the town, but the permission given was withdrawn, and they were returned to the room where they now are. The first son of James Watt, Gregory, died in early manhood and the full maturity of his powers; but the second son, James, survived



his father, and took a most filial and reverent interest in all his father had done. He lived many years at Aston Hall, and did all he could that the law allowed, by entailing the land and making heirlooms of the property, to keep his father's models from being disturbed. Happily, they had been undisturbed, to a very great extent. Many people in Birmingham were anxious that those relics should be preserved in the house in which Watt's son lived, and they trusted that that desire would some day be realised, and that the priceless relics might be preserved for ever. He thanked the engineers for the kindly care they bestowed on those relics when producing drawings of them. From long personal knowledge, he could assure them that the treasure-house of James Watt, Heathfield Hall, had not yet been exhausted, nor thoroughly explored. If that important association could see its way to appoint some competent person to thoroughly overhaul the room at Heathfield Hall, they would not only be pleased and instructed by the results, but posterity would thank them for handing down still further tributes to the memory of one of the most illustrious followers of science and greatest benefactors of the world. Aston Hall, the residence of the second James Watt, was now public property, and therefore any possessions placed there would be, so far as they could speak, absolutely and permanently preserved.

### BIRMINGHAM MASTER BUILDERS' ASSOCIATION.

THE annual dinner of the Birmingham Master Builders' Association was held on Monday night. Mr. H. Sapcote, president of the association, was in the chair. Mr. H. Parton proposed "The Town and Trade of Birmingham," and remarked that twenty-five years ago, to speak of the Market Hall and the Town Hall was to enumerate nearly the whole of the public buildings of Birmingham; but at the present day, thanks to the energy of their public men, the town possessed some of the finest architecture in the country. Every member of that association, he was sure, would feel the great loss that had been sustained in the death of one who had done more than anyone else to beautify the town—the late Mr. J. H. Chamberlain. Every master builder should join that association, in order that the employers might meet the workmen on equal terms. They had an example in the workmen's association, which they might well follow. If the master builders of Birmingham could form themselves into a strong union, they would be able to meet the men firmly at an arbitration board, and so save much misery by preventing strikes which would otherwise occur.

Mr. O. C. Hawkes responded to the toast, remarking that whenever there was depression in other trades the building trades suffered. Such a depression had existed during the past few years; but there was every reason to believe that was now passing away.

The Chairman, in proposing "The Birmingham Master Builders' Association," said they wanted the young members of the trade and small employers of labour to join the association. He believed that, with the committee they had elected, the association was likely to go on successfully. One evil they suffered from was the lowness of prices. Owing to the excessive competition prices for builders' work were at least 5 per cent. too low. Union in the trade might do something to remedy this. They should meet oftener, and the committee should come together more frequently.

Mr. C. W. Barker responded, and referring to the work the association had done, said that for ten years there had been no disturbance between masters and workmen in the building trade. The last strike was the labourers' strike. With the aid of the Builders' Association, the Labourers' Association, which till then had seemed all-powerful, had been defeated, and practically annihilated. Then, instead of having to pay the men in the winter—for they could not employ them—from six o'clock in the morning they now had to pay them only from seven o'clock. Another good thing was the fact that the wages were not now subject to arbitrary and sudden alterations.

Mr. Barnsley, sen., proposed "The National Association of Master Builders of Great Britain." He said one of the prominent advantages of the association was that it promoted intimacy and good feeling among the builders of the kingdom. Competition did not necessarily involve antagonism. He hoped the time was gone when they looked upon such associations as a force needful against other force, though, as with standing armies, the existence of one still rendered the other needful. Happily for some years past in Birmingham the prevailing condition in the trade had been one of good feeling between the operatives and employers. The late Mr. J. H. Chamberlain, during his professional career in Birmingham, did his utmost to promote this good feeling. He had often, when visiting works with Mr. Chamberlain, been struck with the respect, he could almost say with the tenderness, with which that gentleman treated the workmen, and the ready approval he always gave to their work when its quality called it forth. In Mr. Chamberlain's relations with employers, whilst his keen eye and correct taste never failed

to enable him to detect imperfections and mistakes, and his conscientiousness would never allow the interests to suffer, he was always ready to acknowledge that if ever there was a trade that was surrounded by difficulties and vexations, it was theirs, and nothing delighted their deceased friend so much as to see indications of builders and their workmen working in harmony, and possessing each other's confidence and regard. The National Association watched over their interests in Parliament, having during the past session successfully opposed two or three Bills that would have been damaging to master builders; and it provided them with the means of insuring against the claims to which the trade was peculiarly liable under the Employers' Liability Act. Good legal assistance was also one of the benefits placed at their disposal by the National Association.

Mr. W. Knox responded, and added to the list of advantages given by Mr. Barnsley, the contract and apprentice forms provided by the association, which were being generally adopted in the trade.

The health of the president was proposed by Mr. J. Bowen, and drunk with musical honours. The "vice-president and officers," proposed by Mr. Barnsley, sen., and other toasts, followed.

### THE ROMAN WALL.

A PAPER was read by Dr. Bruce at the last monthly meeting of the Newcastle Society of Antiquaries on the recently-discovered turrets on Walltown Crags. It was as follows: At a recent meeting of our society I mentioned that a specimen of that nearly obliterated class of buildings, the turret, which originally were thickly set along the whole line of the Roman wall, had been found upon the westernmost height of the Walltown Crags. Through the kindness of our friend, Mr. Lamb, I have been supplied with an accurately-drawn ground plan of the building, from which I glean the following particulars: The wall at this point of its course is 7 feet thick. The turret is let into the wall to the extent of 2½ feet, leaving the wall immediately to the north of it of a thickness of only 4 feet 6 inches. The interior measurement of the turret from east to west is 13 feet, from north to south 11 feet 10 inches. The thickness of its walls is 3 feet 2 inches. The present height of its walls varies from 3 feet to 6 feet. The wall which forms the north wall of the turret stands nine courses high. In my recent notice of this turret I expressed a hope that further investigation would be made in order to ascertain whether some more turrets could not be found to the east of it, so as to settle the question how many of this class of structures there were between two neighbouring mile-castles. I am glad to say that further light has dawned upon us. Our vice-president (Mr. Clayton) sent the other day his chief excavator (William Tailford) to examine the spot. I give the result of his inquiries. At a distance of 578 yards eastwards, measuring closely by the wall, he found another turret in all respects similar, so far as appearances went, to the previously discovered one. Following the line of the wall closely for a distance of 412 yards a mile-castle is reached. This mile-castle is laid down in Mr. McLauchlan's survey of the wall. Proceeding eastwards again for a distance of 522 yards our explorer found a third turret. This turret stands on the top of the hill on the east side of the gap in which King Arthur's Well is situated. Ordinary observers would not have detected the presence of a turret or other building here, but the experienced eye of Tailford noticed that the herbage on this spot was richer and of a different colour from that of the contiguous parts; he, therefore, put down his spade, and found the turret. Like all the others it was let into the wall, and it measured from east to west 11 feet, and from north to south 9 feet 6 inches; until a thorough excavation is made the height of its walls cannot be given. Horsley thought that there were four of these turrets, or, as we may call them, stone sentry-boxes, between each mile-castle. So far as we can at present see there were but two. It seems desirable that a little further exploration should be made with a view of settling the point. If the wall be carefully examined between this third turret and the mile-castle that lies to the east of it, and which is laid down in Mr. McLauchlan's survey, remains may be found which will tell us whether there were two, three, or four turrets in the interval between two neighbouring mile-castles. In the meantime we are gratified with the thought that we now know of five turrets—the three of which I have now spoken, and that on the Black Carts farm, and that at East Brunton, both of which have been excavated by Mr. Clayton—whereas a few years ago we could not point to one on the whole length of the wall. In due time these newly-discovered turrets will doubtless be thoroughly excavated and protected by iron railings from the destructive tread of cattle, in which case the Nine Nicks of Thirlwall, always specially interesting, will have acquired a new glory.

A Mortuary Chapel has just been built in Brunswick cemetery, Bury, from the plans and under the superintendence of Messrs. Maxwell, Tuke & Hurst, architects, Southport.



## NOTES AND COMMENTS.

MR. RUSKIN has been lecturing on book illustration by means of woodcuts at Oxford. As was to be expected, he disapproves of the American examples, which indicate how far machinery is invading the province of art. It is far easier to cover a surface with fine lines by means of a multiple graver than to produce perfect outlines. When the Americans reproduce open-work the failure is remarkable. Mr. RUSKIN referred with some horror to an attempt to express a sunset by means of lines, which, singly, are mechanical. The illustrations in *Punch* by the late JOHN LEECH, Mr. DU MAURIER, and Mr. TENNIEL found more favour with Mr. RUSKIN. They were described as having exercised an influence on English character. It would be difficult to determine whether Mr. RUSKIN is right in saying this. The young English women drawn by LEECH almost seem to belong to a different species, compared with those which are represented every week; but is not the change to be attributed to some other cause than a difference in the draughtsmen?

MR. POUNTNEY SMITH, who died at Shrewsbury on Monday, was an admirable type of the old school of provincial architects and gentlemen. In his early days he was a builder as well as an architect, and he was proud of his skill in using tools. A few years ago a fine pulpit and some elaborately-carved bench-ends were illustrated in *The Architect*, which had been designed by Mr. SMITH. But he was not satisfied with preparing drawings: a good many of the figures were modelled by his hands. Mr. SMITH became a resident in Shrewsbury in 1840, and important works in the district have been carried out by him. He restored the noble church of St. Mary, the old church at Battlefield, and designed the churches of Uffington, Downton, Pool Quay, Hope Bowdler, Preston Gubballs, and Morton, in Shropshire; Llandrillo and Llandderfel, in Merionethshire; and Llantysilio, in Denbighshire. Mr. SMITH was the architect of several large country mansions. Illustrations of one for Mr. ROBERTSON, M.P., and another at Llantysilio, appeared in *The Architect*. Mr. SMITH was mayor of Shrewsbury in 1873, and for many years he was a member of the town council and a justice of the peace. It must be recorded to his credit that he never made use of his position in the corporation or on the bench for professional purposes, and architects who were engaged on public works in Shropshire could always depend upon him as a friend.

CLASSES for design and construction have been opened in connection with the Edinburgh Architectural Association. In the class of design the attention of students will be directed to the principles and forms of the best old examples of the various styles under study, and they will be assisted and guided in the preparation of designs based upon these. Each subject will be conducted throughout its continuance by one or more practising architects. The first subject, "A Modern House in the style of Scottish Houses of Circa 1600," will be undertaken by Mr. R. ROWAND ANDERSON, A.R.S.A. In the class of construction the subject selected is, "Iron, Cast and Wrought, in Pillars, Girders, and Roofs." Practical examples will be investigated with the aid of Mr. FAIRWEATHER, C.E., of the University of Edinburgh. The fee for both classes is only five shillings to members.

THE report of Mr. PEARSON, R.A., was read at a meeting of the Peterborough Cathedral Restoration Committee on Wednesday. It recommends taking down the western arch and the two remaining piers of the great tower, as the foundations are in a very unsound condition, and altogether unfit for supporting the heavy piers and tower. The pulling down of these will necessitate the demolition of fully one-half of a bay of the clerestory on both sides of the nave and transepts, and similar extensive work of demolition will have to be carried on in the triforium and aisle arches below. The estimate of the cost of this work, in addition to the 55,000*l.* required for the other work, is 5,797*l.* The meeting recommended that the work should be carried out. The total amount promised and received is 18,482*l.*

IT is not often that so important a case as that of LEIGHTON *v.* Royal Courts of Justice Chambers Company (Limited) is heard in the first week of term. People who pass along the Strand are familiar with the immense building opposite the Courts, the construction of which is the cause of

the action. The Company purchased some houses in the Strand and the whole of Palsgrave Place as a site for their chambers. The plaintiff owned an adjoining house, and he alleged that during the progress of the works his house was injured, owing to fissures which were caused by inefficient shoring and underpinning. He was compelled, for safety, to remove his machinery and business elsewhere. Damages amounting to 4,128*l.* were claimed. The plaintiff's case was supported by Mr. SHOPPEE, Mr. CLIFTON, and Mr. WHICHCORD. The defendants, on the other hand, ascribed the injury to the subtraction of underground water, which could not be avoided, and to the use of heavy printing presses and other machinery, which the house had not been originally calculated to bear. The defendants called for witnesses Mr. T. CHATFIELD CLARKE, Mr. PORTER, Mr. P'ANSON, Mr. CURREY, and the architects of the building, Messrs. WIMBLE & CUTHBERT.

BARON POLLOCK, before whom the case was tried, proposed to be guided by the decision in *ANGUS v. DALTON*. His lordship left four questions to the consideration of the jury—viz. (1) Whether the plaintiff had acquired a right to support with his machinery and warehouse as it existed at the time of the defendants' excavations? (2) Was the plaintiff's warehouse badly built, as the defendants said it was, so that what occurred arose from its own defect? (3) Admitting that an injury had arisen, did it arise from any works carried on by the defendants? If so, what specific work caused it looking at excavation, improperly "underpinning" or "shoring up," the vibration of the heavy cranes, or the subtraction of the water? (4) Assuming the plaintiff had a ground of action, and the defendants are liable, what damages was he entitled to? Was the plaintiff bound to leave the premises in question? The premises being easy of access, were examined by the jury during the trial. After a short consultation the jury answered the first question in the negative, adding that they thought the house had not lapsed through its own defect; and they negatived all the grounds of injury except the subtraction of the water. Judgment was therefore entered for the defendants. The result is important, as it shows that the original purpose of a plaintiff's building must be taken into account, and that a shop or dwelling-house when converted into a factory, is at the owner's risk in regard to questions of lateral support.

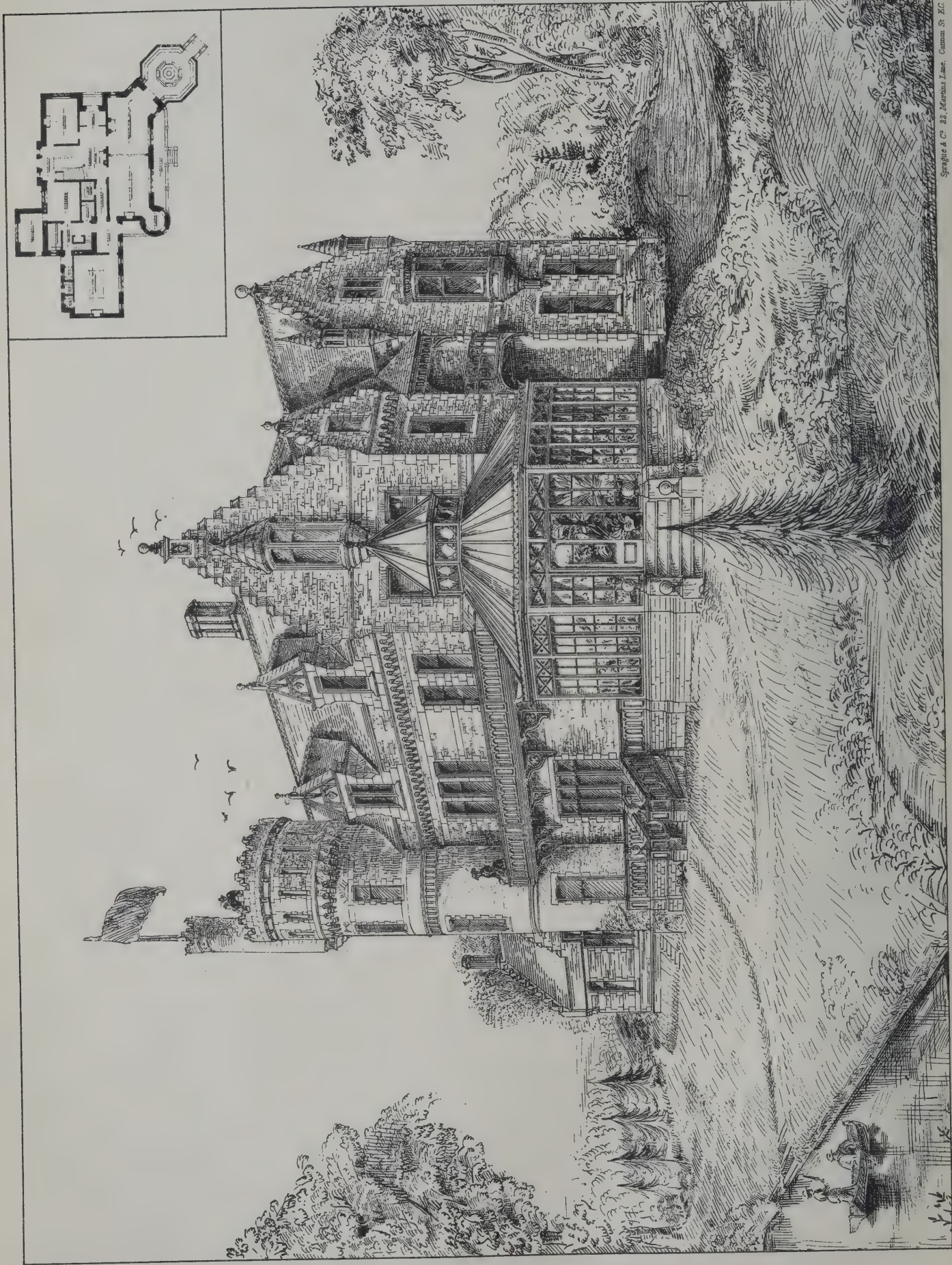
THE article by Mr. LELAND in *Longman's Magazine*, with the title "An Opening for the Unemployed in Ireland," will of course excite curiosity. The author, whose name is not unknown in England, has had experience in conducting an industrial art school in America. He has found that the Irish children are easily taught, and can be employed in the production of various ornamental objects. Mr. LELAND accordingly concludes that what is practicable in the States is also practicable in Ireland, and he suggests that the cultivation of the minor arts might with advantage be introduced into Irish households. At present there is little encouragement in his own country for an Irish student of industrial art. It is true that a large sum of money is expended every year on metal-work, sculpture, and vestments for the Roman Catholic Church, but Belgians and French have all the benefit. The heads of that Church could without difficulty do much for industrial art in Ireland. What Mr. LELAND desires is the introduction of English and Continental capitalists. There is undoubtedly a fine field for a few enterprising men who would be prepared to wait for a return until they had instructed apprentices. All the native efforts are frustrated by the desire to gain profit at once. One notable example is the Fermanagh pottery, which was thrown on the market before the mysteries of modelling and colouring had been mastered.

THE master builders of Birmingham have passed a vote of sympathy and condolence with the family of the late Mr. JOHN HENRY CHAMBERLAIN, who, "as an eminent and enthusiastic member of his profession, was brought into frequent and agreeable intercourse with them." The School Board have also acknowledged their sense of Mr. CHAMBERLAIN's loss. The thirty schools which he had designed for the Board were described as the work of "a man of genius, a man who loved the people, a man who knew what their wants were and how they could be obtained." Mr. KENRICK, a member of the Board, has offered 1,000*l.* to found a JOHN HENRY CHAMBERLAIN Memorial Scholarship. A bust of Mr. CHAMBERLAIN is also to be placed in the Corporation galleries.









Sprague & Co. 22, Mark Lane, Cannon St. E.C.









PROPOSED NEW WAVERLEY HOTEL

FOR SALE

JOHN ARMSTRONG



10<sup>th</sup> 1883.



PRINCES STREET, EDINBURGH.  
N. STON.  
ARCHITECT.

Sprague & Co. 22, North St. London, E.C.













"INK-PHOTO", SPRAGUE & CO, LONDON.

## DECORATIVE

By M. MAZ



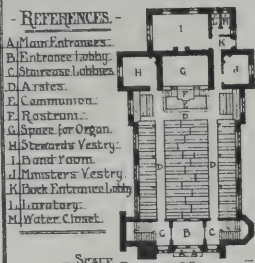








Wesleyan Chapel,  
Horbury.  
W. HANSTOCK A.R.B.A.  
ARCHT. BATLEY



W. H. Hanstock  
Arch. Oct. 1883.  
Printed by J. J. Mansel Lane, London, E.C.







## ILLUSTRATIONS.

DECORATIVE PANELS, BY M. MAZEROLLE.

THE four panels which we publish this week, although not painted at the same time, have some relation to one another, as the subjects are fishing, wine, cookery, and hunting. The originals are painted on a large scale, and have been exhibited. The figures have the grace which is characteristic of M. MAZEROLLE's lightest work.

THE NEW WAVERLEY HOTEL, EDINBURGH.

ONE of the few large buildings which are in course of construction in Edinburgh is the Waverley Hotel at the corner of Princes Street and St. David Street, of which we give an illustration. The ground floor will consist of commodious shops. The hotel entrance is from Princes Street, from which ascending a few steps the first floor is reached, containing a spacious dining-room, 66 feet by 26 feet, finished in accordance with the same style as the outside (which is a free treatment of the Renaissance), smoke-room, drawing-room, commercial-room, lavatories, &c. This floor is constructed of fireproof material, which, from the situation, will be out of danger from fire arising in any of the premises underneath. The roof is also constructed of the same material.

The façades to Princes Street and St. David Street have slightly projecting bays, three of which are circular in plan, and are carried up to the roof through five storeys, and surmounted by a balustrade. The corner one has a dome, upon which is placed a gilt figure of a crane with a stone in foot, being the crest of the proprietor, Bailie CRANSTON, J.P., D.L. The bays are broken by horizontal courses of cornices and mouldings, which break the upright lines of shadow, giving breadth and massiveness to the building. The foundation is on rock and hard boulder clay, upon which are constructed large piers of stone in the basement, from Hailes quarry. The ground-floor is constructed with cast-iron stanchions, and polished red granite piers, upon which are fixed malleable iron girders, and the fireproof floor construction. The stone used for the building is from Gunnertown quarry in Northumberland. The slates on the mansard roof are Westmoreland green, which will harmonise with the red granite columns and pilasters on the two elevations. The hotel is fitted up with electric bells throughout, and the ventilation of the rooms has received special attention, in several of them, as in the smoke-room, large shafts have been provided for the extraction of the foul air and suitable inlets provided for fresh air.

The hotel occupies one of the best sites in the city of Edinburgh, and the effect will be in keeping with the surroundings, as one of massiveness on the whole, combined with grace and elegance in the details.

The contractors for the work are Messrs. W. & D. MACGREGOR, builders' work; Messrs. DAVIDSON & CHISHOLM, carpenters' and joiners' work; Mr. BAIRD, plaster work; Mr. BARTON, plumbers' and gasfitters' work; Mr. SLATER, slaters' work; Mr. THOMAS TAIT, ironfounders' and smiths' work; Messrs. CUNNINGHAM, glaziers' work; Messrs. CRANSTON & SCOTT, painters' and decorators' work; Mr. DAWSON, the electric bells, speaking-tubes, &c.—all of the city of Edinburgh; and, in addition to the above contractors, the granite work is supplied by the Great North of Scotland Granite Company, Limited, Peterhead; the ornamental ironwork by Messrs. MACFARLANE & Co., of Possilpark, Glasgow; iron windows, &c., by Messrs. CARLOW, COULSON & Co., Glasgow; the wrought-iron girders and fireproof work by Messrs. HOMAN & RODGERS, of Manchester. The whole of the work is being carried out under the direction of the architect, Mr. JOHN ARMSTRONG, 2 Queen Street, Edinburgh.

WESLEYAN CHAPEL, HORBURY, NEAR WAKEFIELD.

THE chapel is now being rebuilt on the old chapel site, which is a very good position, fronting the turnpike-road to Wakefield, and surrounded by trees. The buildings comprise body of chapel, with galleries at each side and one end, entrances, recessed organ-chamber, band-room, ministers' and stewards' vestries, water-closet, and lavatory accommodation. The accommodation in all is for 526 persons, allowing 20 inches for each in length, being 307 on ground floor and 219 in galleries. All internal woodwork exposed to view will be in pitch pine, varnished.

The roof is in one span, but divided internally into nave and side aisles by ornamental clerestory arches of wood, with tracery fillings, all supported on ornamental cast-iron columns. The ceiling is half open, and divided by arched wood bindings and moulded purlins, the spaces between being plastered. The covering of the roof will be of the best Bangor blue slates, with dressed stone ridges. The choir will be seated in front of the organ within the organ-chamber, the floor of which is 4 feet 6 inches above level of ground-floor. The rostrum is about 6 feet 6 inches by 5 feet, in pitch pine, with panelled and moulded fronts and tracery fillings. The communion will be protected by a brass railing supported on ornamental wrought-iron standards. The seat framing throughout will be 1½ inches thick, with ornamental stop chamfered bench ends, 2 inches thick, and each line of seating provided with a book-board and hat-rail, &c. The glazing will be in cathedral leaden lights, slightly tinted, with small border round in strong colour.

The style of architecture adopted throughout is Decorated Gothic of the thirteenth century. The height of the building from ground floor to eaves of roof is about 21 feet, and from ground floor to apex of roof about 42 feet. The small tower and spire is of solid masonry, 7 feet square, pierced in places by small tracery-headed windows, and its total height from ground floor is about 70 feet. The front wall is of pitch-faced delph wall-stones, 2 feet 6 inches thick, with Holmfirth ashlar dressings. The side and back walls are of chopped delph wall-stones, 2 feet thick, with Holmfirth ashlar dressings also.

The chapel will be ventilated by TOBIN'S inlets, WADDINGTON'S syphon ventilators, and extracting grates in ceiling conveying the vitiated air into false roof, and from thence to outside by means of louvres in gables.

The building was let in one contract to Messrs. J. & W. BEANLAND, of Bradford, for the sum of 2,414*l.* This amount does not include heating apparatus, varnishing and decorating, stoves, gasfittings, or architect's commission. The carving will be executed by Mr. HARRY HEMS, of Exeter. The heating apparatus is not yet decided, but very probably PERKINS' high-pressure system of hot-water piping will be adopted. The whole of the works will be carried out from the designs and under the superintendence of Mr. WALTER HANSTOCK, A.R.I.B.A., architect, Batley.

RESIDENCE FOR THE HON. A. C. B. BANNATYNE, WINNIPEG.

THIS building has been lately erected from the designs of Messrs. ROWAN & PAYNE, and is published with the object of suggesting the class of mansions that find favour with Canadian proprietors.

## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE first ordinary meeting of the session for 1883-4 was held on Monday evening, the 5th inst., the president, Mr. Horace Jones, in the chair. Various donations to the library were announced, and votes of thanks awarded to the donors, after which a ballot for new members took place, when the following gentlemen were declared duly elected: Messrs. J. F. Wood, C. F. Moore Cleverly, C. H. Brodie, and W. Scott, candidates who had passed the examination in architecture, as associates; and Messrs. F. T. Wilberforce Goldsmith and F. Johnson, also as associates, and who had passed the voluntary architectural examination in the class of proficiency.

The following is an abstract of the opening address delivered by the President.

## The President's Address.

THE PRESIDENT alluded to the losses sustained and the inroads which a year had made in the ranks of the Institute since the opening meeting of last November, the number being no less than twenty-two. Among the foremost he mentioned the great Viennese master, one of the recipients of the gold medal given by Her Gracious Majesty the Queen on the recommendation of the general body of fellows, Heinrich Baron von Ferstel, who died on July 14 last, after a long and painful illness, at the comparatively early age of fifty-five. Two days afterwards his body had been conveyed to the Votive Church—the work of more than twenty years of his life—where the funeral service was performed previous to its interment in the family vault at Grinzing, the place of his residence when alive. A list of his principal works was to be found in the Proceedings of last session, and a memoir of him would in due course be printed in the Transactions. Three other honorary and corresponding members had also died during the session, viz., Professor de Fabris, architect, of Florence, for some



time president of the Royal Academy of Fine Arts in that great city; Christian Hansen, of Copenhagen, a brother of Theophilus von Hansen, of Vienna, honorary and corresponding member, and the Count Vespignano, architect to St. Peter's at Rome.

Though in this country, as if to afford a contrast to the events of 1881, death seemed to have spared the elders, a more than usual number of young professional men had fallen; two even of those who a few months ago were among the first to enter the ranks of the associates under the terms of the by-law which enforces examination, had passed away, namely, Samuel Cuthbert Rogers, at the age of forty-five, and Cecil Haden Stock, in his twenty-fifth year, the latter of rapid consumption in New Zealand, whence he was ordered in the hope of benefit from a sea voyage. Besides these, there are other cruel losses, such as R. M. Marnock, associate, a young man of promise, who died in Australia, and R. C. Page, associate, whose recent death has evoked sincere regret, neither of whom had reached to forty years. The other associates lost by death were A. W. Archer, W. A. Baker, B. W. Cummings, J. W. Forge, F. P. Hughes (Madras), W. Moffatt (Aberdeen), B. A. Paice, and T. E. C. Streatfeild. Two fellows had passed away—viz., R. L. Sibley, a well-known district surveyor, and C. N. Tripp, of Gloucester. Four honorary associates had also succumbed—viz., W. G. Harrison, the well-known and highly-esteemed Queen's counsel; J. Gascoigne Lynde, of Manchester; Sir Edward H. Scott, the banker; and William Spottiswoode, who as president of the Royal Society held a position of special honour. His loss could not fail to be felt by a larger circle than his own personal friends, and it was a mournful gratification to know that, as in the case of the late Mr. Street, a fitting resting-place had been found for the remains of the late president of the Royal Society among the highest worthies of the nation, in Westminster Abbey.

An important event of the year was the opening in state of the Royal Courts of Justice on December 4 last by the Queen, and with a befitting ceremony, including a deputation and address from the whole body of the workmen who had been employed upon the works. He was aware—at least he had often noticed—that in the reports given at various times by the public journals of laying the foundation-stones, and also at the completion of the public buildings, when a royal dedication took place, the names of the architects were generally omitted, and the buildings might have been raised by the touch of some fairy wand as far as regarded any allusion to the hands, hearts, or heads of those who had laboured for perhaps years over them. It was therefore an act, in accordance with the kindly spirit of Her Majesty, to graciously express her pleasure at the loyal address presented by the workmen of the various crafts employed upon the buildings, and congratulate them upon the successful results of their honourable toil. He would not attempt to review that building; but they were all aware that, shortly after its opening, a good deal of criticism was evoked upon several points, especially the temperature and ventilating; and he need scarcely remind them, though he would wish to remind the public, that a newly-built and recently-finished building required some little time to dry and season, and that many of these defects of heat, ventilation, and even acoustics, loudly complained of at the moment, would cure themselves in a very moderate period by the natural effect of use, of wear, and of time.

The opening of other royal courts of justice was soon to take place, namely the Palace of Justice at Brussels, and he remarked with feelings of some regret that the British did not emulate the Continental peoples in their willingness to bear the expense of liberal contributions for public buildings and national monuments. Let them reflect that Belgium, a country not much more populous than the English metropolis, and Brussels, less populous than some of the London parishes, had readily found treble the amount for a palace of justice that the English did. Had the same liberal scale been applied to those Royal Courts opened in December last, he felt sure that many unkind criticisms of the edifice would have been changed into "pæans" of praise and admiration. Among other buildings completed and opened during the past year, he would mention the new Galleries in Piccadilly of the Royal Institute of Painters in Water-Colours, the work of Mr. E. R. Robson, a fellow and colleague; also the new City of London Schools in Blackfriars, by Messrs. Davis & Emanuel, architects.

Last year he had touched upon the question of the safety from fire of public edifices, theatres more especially, little thinking that within a few short weeks the daily papers would be full of the catastrophe at the Alhambra Theatre. The original building, a clever and praiseworthy attempt to use Arabic architecture, the work of their respected friend and past vice-president, Professor Lewis, was intended as a home for science under the name of the "Panopticon." But as was too often the case it had been "the alchemist's search," and instead of turning smoke into gold, it turned the gold into smoke, falling in the end into other hands. The sad and terrible calamity which happened at Sunderland, although not from the same cause, furnished another incentive for some such course being taken as he suggested last year, viz., that competent men of different nations, should take the matter into serious consideration, so as to improve the efficiency of construction, the convenience, economy, and safety of public buildings.

One source of danger was the use of doors opening only one

way, and when these by any chance got clogged, or were subjected to pressure by a number of people pushing against them, thus preventing their being opened, the likely and obvious result would be a serious catastrophe, to which of course any building might be subject equally with the one mentioned. Doors intended merely to shut off divisions might be made to open both ways upon spring hinges, or where on account of draught, &c., they could only be made to open one way, such as in passages, stairs, &c., they might be framed with an inner stile and rail to open in an emergency the contrary way to that which they generally did. Such a system would be particularly applicable to the iron fire-resisting doors separating one section of a building from another.

He had now to allude to the proposed completion of Blackfriars Bridge, and the desire of the Corporation of London to adorn the four pedestals or piers at each end of the bridge with ornamental sculpture. In July 1880, the matter was referred to the Bridge House Committee for the purpose of obtaining designs for the proposed work, which in due course were produced. The committee had availed themselves of the courteous advice and the high talent of Sir Frederick Leighton, the president of the Royal Academy, William Calder Marshall, R.A., and George Frederick Watts, R.A., who had considered the various works sent in competition, and reported their opinion thereon to the committee. He (the president) had had the honour of being associated with them, and unfortunately they had been compelled to report that among the various designs recommended for premiums none were adapted for execution; a decision which was endorsed by the Bridge House Committee, and approved by the Corporation. At the end of 1881 the matter was again referred to the committee to proceed further, when they conferred with the same gentlemen, who gave a unanimous opinion as to a certain mode of procedure, but one which involved considerable alteration to the pedestals of the bridge. To that opinion, from various reasons, the members of the committee objected, and they came to the conclusion to leave the piers or pedestals unaltered in size; in fact, to follow the original suggestion of Mr. Cubitt, the architect of the bridge, as to an equestrian statue; and further, to obtain, if possible, an equestrian statue from which a cast could be made, whereby an opportunity would be afforded of appreciating the size and judging the effect of the same upon one of the pedestals of the bridge. An equestrian statue had been obtained from the hand of the clever French artist, M. Clésinger, representing a gallant soldier or commander, of royal or of noble race, of the sixteenth century. Its extreme length was about 23 feet, and the extreme height nearly the same. He hoped that in a short time that model would be placed in position; though, indeed, it was quite understood by the committee that there were many points in the work which would have to be altered or avoided in any fresh production or design intended to be permanently put up, nor was the model intended to be any indication of the proposed treatment or subject other than as regards size and general dimensions.

In alluding to the proposed communication across the Thames below London Bridge, he would observe that an inquiry into the various schemes and reports placed before the Corporation and the public had tended to confirm the views held by many who had had this question long before them. In the first place with regard to communication by ferries. However appropriate in less crowded streams than the Thames, and when the tide is less strong, ferries had been, and continued to be, and would continue to be useful means of communication between opposite banks, yet in the Thames they would serve more as an indication of what the intercourse between the two shores consisted, than a permanent substitution for other modes of communication, and perhaps their real benefit would be to show the approximate necessity or obligation of forming the proposed communication. Secondly, with regard to high-level bridges, it had been clearly shown to be probable that people would just as soon make a round or circuit as mount a considerable height only to descend again; that the actual distance to be travelled, whether by mounting and descending, or taking the round of London Bridge, would not be very different in going to or from the East End of London and the Elephant and Castle, Kennington Gate, &c.; and it had also been clearly demonstrated that a tunnel would require the same length and the same gradients as a high-level bridge, only that of course they would be reversed. Both these methods were considered by their principal supporters to be considerably ameliorated by the ample means of giant lifts and other machinery worked either by hydraulic or steam power, but there were some who looked less kindly on such appliances. Thirdly, a low-level bridge, which, in respect to the land traffic, was of course unexceptionally the most economical, meant, as regards the river traffic, which was really many times greater than the land traffic, absolute annihilation, as far as sea-going vessels were concerned, west of any such proposed bridge, though the nearer it was placed to London Bridge the less serious would be such annihilation. A low-level bridge with openings would not cost more than one-third of the others, and if the waterway were left open, with occasional closures, for say two or three hours during each tide, that would be the maximum interference with the river traffic. At night the opening of the bridge at high water would be continued, as the occasional closures would not be required.



Various statistics had been taken, but none which absolutely showed the exact number of vehicles which pass from the north end of the Minories and more distant points to, say, Tooley Street or Bermondsey Street. From those statistics of vehicular traffic and foot passengers the one taken on July 3, 1876, showed that about 99 was the number of vehicles that passed in this direction, and about 156 in the direction of Bricklayers' Arms and Old Kent Road; but the gain to these latter would have been very slight even had there been any other communication on either the east or west side of the Tower. Therefore it might be assumed that there were not more than about 260 vehicles for which this bridge was to be made. If, however, they doubled the number, and made it, say, 500 each way, that would be a very liberal, if not an extravagant, estimate of the present position of the traffic. It had been assumed by Sir Joseph Bazalgette and Colonel Haywood, and many others who had considered the question, that that traffic would very quickly rise to between 4,000 and 5,000 per diem; but it must be kept in mind that public money should only be spent in the improvement of present thoroughfares, trade, &c., and that to spend money for the future and speculative improvement of any district is not to improve the interests of the added number of the inhabitants, because they are not there, but only to improve the value of the landowners' property, on the future improvement of special trades or commerce, improvements which common political economy most plainly indicated should be borne by individuals and not by the public any more than the public should pay the expense of new roads, sewers, railings, &c., of agricultural or waste land in order to permit the freeholder to reap the advantage of it as land ready and laid out for building purposes.

A temporary steam ferry had been estimated at from 10,000*l.* to 20,000*l.* per annum; and if one could be substituted for a year or two at 14,000*l.* or 15,000*l.*, it would demonstrate the propriety or non-propriety of expending a capital sum, the annual interest of which would be equal to 30,000*l.* per annum at the lowest, and under certain circumstances up to 120,000*l.* or even more.

In regard to a high-level bridge it had been already demonstrated that a height sufficient to leave the river traffic uninterrupted would render the bridge utterly useless on account of the length of the ascents and descents. Lifts, say 70 or 80 feet high, might mitigate this to some extent, but would of themselves be an unsatisfactory solution of the problem. Then, as to cost, Sir Joseph Bazalgette estimated the cost of a high-level bridge at between two and three millions. A tunnel would be equally inconvenient, incur much the same expense, and, without lifts, would be equally useless. One scheme, devised by private enterprise last year, was lost before Parliament. It had, however, the inconvenience or convenience, as the case might be viewed, of twelve lifts, six on either shore, and their estimate appeared to promise some considerable economy.

A low-level bridge appeared now to be the only matter to be dealt with. First let them take that which would be most convenient for land traffic, viz., an uninterrupted one. The nearer it was to London Bridge the less damage would it do to the river traffic. One had been designed, keeping very nearly on a level with Fenchurch Street, the upper floor of Billingsgate Market, the departure platform of the London and Brighton Railway, London Bridge, and running again into High Street, Southwark. The cost of that would be considerable, probably approaching two millions, and it would receive serious opposition from the owners of Fresh Wharf. The one proposed to be erected upon the site east or west of the Tower would cost, if continuous, about half a million of money, but it would be the ruin and annihilation of all the wharves westward of it to London Bridge, including Billingsgate, and it would be pursuing a diametrically opposite course to that pursued by Manchester and other important commercial centres, viz., bringing seagoing ships as near the heart of their trade as possible. It would interfere with and stop the reception of thirty or forty millions per annum which would be gladly welcomed by the wharves at Ratcliffe, Limehouse, Blackwall down to Gravesend, as also by the docks which had been and were still being made; and when a trade was once displaced it might seek other and more distant localities. To obviate that—a serious and imperative reason—a low level bridge must be made with openings readily worked and thoroughly adapted to passing an average of about twenty seagoing steamers to and fro per diem (say ten each way each tide). The present line of berthing ships gives a clear space of say 300 feet, and if that, or even if desired or deemed necessary a few feet more were given, no more inconvenience need arise than existed now in passing the line of boats and ships berthed as at present. If that 300 feet space were maintained, and the bridge kept open at high water, at a slight inconvenience to the land traffic, no complaint of obstruction could be made as to the river traffic. Such a low level bridge could be constructed either as a swing or lever bridge, or a bascule or lifting bridge, designs for all of which have already been before the committee and the public. One proposal made by an eminent engineer was to put a pivot bridge in the middle of the stream; that appeared to be a mistake, as it reduced the maximum of the opening to only about 180 feet clear of the berthing line of barges, &c. There were several other methods which had been submitted and which might probably be remembered, such as the shooting bridge to be

shot out or slid from each side to meet in the centre; also a scheme for raising the centre portion bodily 100 feet high, and another to sink it down into the depths of the water, &c. Of those, time would not permit him to speak further.

To revert now to the more immediate concerns of the Institute, the president was glad to be able to state that arrangements had been made with the Glasgow Institute of Architects, a society constituted on the same bases of professional obligation and motive as the metropolitan chartered body, whereby an examination of candidates desirous of qualifying for candidature as associates of the latter would be held at Glasgow, provided only sufficient number of applications be received before the end of this year. He anticipated ultimate success for this attempt to spread architectural education, and he went so far as to hope that similar examinations to those already held in London might be annually conducted by local societies of architects, not only in Glasgow but also in Manchester, Leeds, Birmingham, and, the fates being propitious, in Bristol. As a proof of the increasing interest in teaching and examination, he would remind his audience that in his address last November he had mentioned the City and Guilds of London Institute as coming into use and worthy of support. He was pleased to be able to state that this year the candidates for examination in that technical college numbered 2,397, as against 1,972 in 1882, giving an increase of 425.

Last year he had also alluded to the privileges of non-metropolitan fellows of the Institute as compared with those of the metropolitan fellows. Since then considerable progress towards an understanding in the matter had been made. A special committee of the council was appointed to confer with the Manchester Society of Architects on the subject, the result being that a communication was made to Mr. John Holden, the hon. secretary of the latter body, of which the following is a verbatim copy:—

"Referring to the memorial dated August 16, 1882, in respect to the position and privileges of non-metropolitan fellows of the Royal Institute of British Architects, submitted on their behalf by your Manchester Society of Architects; referring also to the conference held in London on December 3, 1882, between the representatives of your society and a sub-committee of the council of the Institute, whose report, dated January 6, 1883, containing resolutions agreed upon by the Manchester society and the sub-committee, offered suggestions for ascertaining the sense of the whole body of fellows in respect to the annual election of officers and the affairs of the Institute generally, without compelling every non-metropolitan member to travel to London in order to record his vote in person: we have to state that after long and careful consideration the council have decided to meet the views of the memorialists in the matter of eliciting individual opinions and advice in writing from the general body of fellows. For this purpose, with regard to the next annual election, it has been decided as a tentative course to forward prior to the first issue of the balloting list a circular letter to every fellow throughout the United Kingdom, inviting him to fill in on a blank form (to be enclosed with the circular) the name of any fellow, or the names of fellows not exceeding four, whom he would suggest to the consideration of the council for nomination in such list as ordinary member or members of council for the ensuing year of office.

"With regard to the enactment of any new by-law, or the alteration, repeal, or suspension of any existing by-law proposed under the terms of By-law LXXII., or with regard to professional questions of general interest, the council propose to adopt a similar tentative method of previously ascertaining the views thereon of the whole body of fellows. Before this decision was arrived at, the council sought legal advice in respect to the true limit of interpretation to be given to that clause in the charter, which states that, 'At all general meetings and meetings of the council the majority of the members present, and having a right to vote thereat respectively, shall decide upon the matters propounded at such meetings.' The hon. solicitor was good enough to devote much attention to the subject, and the result confirmed the council in their opinion that a fellow, in order to use his privilege of voting, must be present in person, while any suggestion which might nullify or even evade that law would be in opposition to the true intent and meaning of the charter.

"Imbued with these convictions, but feeling at the same time a sincere desire to satisfy, as far as lies in the power of the corporate body, the wishes of non-metropolitan fellows—anxious also to see the latter engaged equally with their metropolitan colleagues in the work of the Institute, the council trust that this proposal for previously obtaining the advice in writing of the whole body of fellows, in respect to the annual election and the affairs of the Institute generally, will be accepted by fellows resident at a distance from London in the spirit in which it is offered, and that the tentative efforts to be made next year for the purpose may prove useful and beneficial to the Institute at large."

At the same time a slight modification of By-laws Nos. XXVI. and XXVII. in regard to the election of officers had been proposed and accepted, particulars of which it might be desirable to mention. In January last a friendly requisition was submitted under the terms of By-law LXXI., signed by William White, F.S.A., fellow; Ewan Christian, vice-president; Thomas W.



Cutler, fellow; Robert W. Edis, F.S.A., fellow; R. Phené Spiers, F.S.A., fellow; John Noyes, fellow; Alfred Waterhouse, A.R.A., member of council; and Joseph Peacock, fellow; asking the council to consider the By-laws XXVI. and XXVII. on the grounds that, in the opinion of the requisitionists, the nomination to the highest offices of the Institute ought to be in the unrestricted discretion of the council. A conference between them and the council was held on February 26 last, when on their behalf two resolutions were offered to the council as suggestions in respect to the alteration of the by-laws in question; and after careful and protracted consideration of them the council arrived at the decision contained in the following extract from the minutes of meetings of council held on June 11 and 12.

"That as regards the nomination of the president the council shall be empowered to nominate for election any fellow or hon. fellow of the Royal Institute of British Architects; that present and past members of council alone shall be eligible for nomination as vice-president; and that no vice-president who has filled the office for six successive years shall be eligible for re-election as vice-president until the expiration of twelve months from the termination of his office. Further, that the enforced retirement of members of council annually by rotation is not desirable."

In accordance therewith the president added that the council proposed to take the earliest opportunity of recommending to a special general meeting of the Institute the alteration of By-laws XXVI. and XXVII., and, if necessary, of other by-laws relating thereto.

Some time during the session opened to-night, probably about July, continued the president, the Institute would enter upon its fiftieth year of existence; and though the president had no wish to forestall the interesting remarks which would be more appropriate in the mouth of his successor, he thought it an agreeable duty to intimate the near approach of so interesting an event. Of those worthies who met in 1834, their excellent and venerable friend, Professor Donaldson, was the only survivor. He trusted that when they were called upon to celebrate their full half century, the professor would be with them in health and spirits to point a moral and adorn a tale of interest and importance, he ventured to believe, to the profession of architecture. At the jubilee of the Institute a large number of architects from all parts of the United Kingdom would probably be gathered together in London, and, following the precedent of 1881, the conference would take place at the period of the annual meeting during the first week of May. He trusted that the gathering would be not only national, but even international, for he had reason to know that more than one foreign corresponding member would on the occasion gratify their British *confrères* with their presence in this country.

Mr. ALFRED WATERHOUSE, A.R.A., proposed a vote of thanks to the president for his address. Mr. Waterhouse said he should not attempt to follow the arguments of the president, particularly in regard of improved communications across the Thames, below London Bridge; as it was a subject he did not understand, though a most important matter. They would all join with the president in regret at the loss of Baron Ferstel. Certainly all who were personally acquainted with his work must have esteemed him as an architect of eminent power. It was sad to find so many leaders in the profession dropping off by death; but, looking at the excellence shown by younger members in the profession, an excellence which was on the increase, they need feel no fear for the future.

Lieut.-Colonel PRENDERGAST seconded the vote, and spoke of the blocking of traffic on London Bridge; he thought a great deal of the existing traffic could be reduced if arrangements were made with the great carrying companies for the purpose. He brought forward, as an instance, the fact of one of the railway companies bringing in goods to a dépôt without there being any sort of necessity for so doing.

Mr. HYDE CLARKE cordially supported the motion.

The vote having been then put to the meeting, it was carried by acclamation, and the meeting was adjourned to the 19th inst.

**Bank at Leek.**—A new building has been erected for the Manchester and Liverpool District Banking Company at Leek. The walls are built of thin dark-fired Ladderedge bricks, with Roche stone dressings; the exposed timber framing and cornices, and principal windows and outer doors, are of teak; Broseley tiling is used for the roofs; and the glazing generally is patent plate in lead quarries. The interior of the portico is faced with bricks of russet Burmantofts faience under a frieze of Mr. D. Morgan's tiles. The length of the banking-room is 48 feet; width, 24 feet; and height, 15 feet. The walls are lined in arcading with St. Sylvester and Napoleon marble and white marble concrete, with Scagliola decorations. Below this is a wainscoting of polished American walnut, and the same wood with Spanish mahogany is used for the doors and the extensive furniture of this room. The ceiling is coffered by moulded beams and ribs, and is mainly executed in American whitewood. The works have been carried out to the plans and under the superintendence of the architects, Messrs. W. Sugden & Son.

## MANCHESTER SOCIETY OF ARCHITECTS.

THE report of the Manchester Society of Architects for 1883, being the nineteenth, states that the number of members on the books is now thirty-five. The council have not yet succeeded in obtaining such a revision of the regulations of the Royal Institute of British Architects as would justify them in recommending the members to join the Institute. An interview was held in London with a committee of the Institute, but a legal difficulty is supposed to be an impediment to any new regulation which would give provincial members a voice in the conduct of the affairs of the Institute. The question of "easements of light" has occupied the attention of the council of the society during the session. In the competition for students' prizes, the first society prize was awarded to A. N. Wilson for drawings of a part of Cheetham Hospital, and a supplementary prize to J. W. Belhouse. Mr. J. P. Holden's prize was obtained by H. Harrington for drawings of a portion of Lyme Hall, Cheshire, and the supplementary prize by A. N. Pearson. The prizes for students of the Manchester and Salford Building Trades' Institute were awarded to T. Bowden, A. E. Little, and J. A. Ruddock. The council call the attention of the members to the competition for the Dublin Museum, and the treatment of Mr. R. Knill Freeman, one of the members of the society. "A new competition," it is said, "has been arranged, in which architects generally are invited to send in drawings, and it is presumed that the next selection of architects will be in accordance with the wishes of the residents." The opinion of the society has been sent to the council of the Royal Institute, urging them on behalf of the profession generally to enter a strong protest against the transaction. The report next refers to the destruction of the Gaiety Theatre, Manchester, by fire. It was a building which should never have been used for public purposes. The council say that at different times they have directed attention to the dangerous character of certain buildings—the Queen's Theatre among others—but up to the present their efforts have been fruitless. After some terrible disaster a move may be made in the right direction, if the sufferers are of sufficient local standing to compel attention. The following officers and council for 1884 have been elected: Messrs. John Holden (president), J. W. Beaumont, R. J. Bennett, R. Knill Freeman, James Murgatroyd, Ed. Salomons, J. Steven, and J. Ely (hon. secretary).

## THE DWELLINGS OF THE POOR.

ONE of the subjects introduced by Mr. Goschen in his lecture on the *laissez-faire* policy, which was delivered in Edinburgh on the 2nd inst., was "The Dwellings of the Poor." He said: I cannot conclude this review of the causes of the present intense demand for Government interference without alluding to the burning question of the housing of the poor. In this case nearly all the causes which I have noted combine to create the demand—a public sense of moral responsibility, dissatisfaction with the present distribution of wealth, complications arising from the crowded state of society, and the belief that Government is the *deus ex machina* to solve an almost insoluble problem. I include dissatisfaction with the existing distribution of wealth, for no candid observer can ignore that the high profits realised by the landlords and the extreme poverty of many of the tenants are strong elements in the present agitation. But what will carry this movement forward to an actual experiment, as it has carried others, will not be expediency, though arguments based on expediency will be most powerfully urged, nor the agitation of those who have to pay exorbitant rents, but a wave of deep and strong feeling passing over the public mind. I agree with Lord Salisbury that the principle of *laissez-faire* cannot be pleaded in bar of any action in the matter. A most complicated situation has been created, partly by acts of the Legislature itself, in which "natural liberty" scarcely exists; and it is clear that there are many parts of the subject with which, under any theory of *laissez-faire*, the State is competent to deal. But the first question to be decided will be whether the State is simply to appear on the stage in a benevolent character, placing national resources, in loans or otherwise, at the disposal of persons prepared to build houses for the poor; or whether the true beginning is not to insist on a sterner and more thorough enforcement of individual responsibility. To my mind the argument is almost irresistible, that it is as just to prevent, and, if necessary, to punish house-owners who let out rooms unfit for human occupation as tradesmen who offer putrid food for sale. Tenants may knowingly, in their inability to procure other accommodation, take such rooms and pay famine prices for them, just as the extremely poor might knowingly buy bad food. But this does not relieve the owner of his responsibility, nor can the State permit the evils of a virtual monopoly to be intensified by that monopoly being used in a manner destructive of health and morality. Two evils have to be met—the existence of vast tracts of buildings, partly themselves dangerous to health, partly so occupied and crowded as to be dangerous to health; and secondly, the absence of sufficient suitable dwellings. The State is more



capable of dealing with the former than with the latter, and here is the key to the situation. No element in the whole matter is more important than how, and at what price, sites can be obtained. The readiness to embark capital will depend on the cost of sites. It is possible that when purchasers, armed with loans from the State, enter the market, the value of building sites will rise still further if the owners of the filthiest dens commanding monopoly rents are to be allowed under a compulsory sale to value the profits of their own wrong. The principle of *laissez-faire* has never been extended to prevent us from prohibiting the sale of noxious food. It cannot be invoked to forbid the valuation of house property according to its value for legal use, and for legal use alone. It remains for the State to define what, looking to the requirements of health and the prevention of crime and immorality, such legal use shall be. Whatever action the State may ultimately take, it is to be hoped that while the duties of the community are enlarged on and pressed, the duties of individuals, and the propriety of enforcing them, may not be neglected. The general question is obviously too large for treatment on my part to-night, and there is a certain inconvenience in dealing with a topic of such grave importance in an incidental manner; but looking to the interest it excites, and the degree to which the principle of Government interference is sure to be discussed in connection with it, some allusion to it was indispensable.

### DISCOVERY OF AN ANCIENT CHURCH IN JERUSALEM.

AN account of the newly-discovered church, north of the Damascus Gate, Jerusalem, appears in the "Quarterly Statement" of the Palestine Exploration Fund. The author is Dr. Selah Merrill. The ruin has proved to be one of great extent, and of special interest. The way in which it was brought to light is worth recording. In an uneven field, which rose considerably above the land about it, parts of which appearing, indeed, like little hillocks, the owner of the soil tried to maintain a vegetable garden, but the ground was so dry that neither grain nor vegetables would flourish, and even irrigation did little or no good; besides, here and there large holes appeared in the ground which could not be accounted for. At last the owner determined to dig and see what there was below the surface of his field, and to his surprise he very soon came upon fine walls and a pavement. The excavations being followed up have laid bare a church with some of the surrounding buildings. The amount of *débris* which had accumulated above the floor of these buildings was 10 to 20 feet in depth. To remove this mass of earth has required much time and labour, and the work is not yet completed. The piece of ground in question has about 60 yards of frontage on the main road, and extends, so far as the excavations go, about the same distance back from the road, that is, to the east.

The church itself is situated on the south side of this plot, and is very near the street. The ground in front of the church is paved with fine slabs of stone. The steps by which the church was entered were 5 feet wide, but the doorway itself was somewhat wider. From the entrance to the altar-step, or platform, the distance is 55 feet, and from that point to the back of the apse 15 feet 6 inches; the width of the apse is 16 feet 6 inches. The width of the church is 24 feet 6 inches. Nine feet in front of the altar-step a wall has been thrown across the church, in a manner similar to that in the church of the Nativity at Bethlehem. This wall, also those of the church, of which several courses remain, and the interior of the apse, show that the building was originally painted, and some of the figures and designs can still be traced. At the south-east corner of the church, leading from the apse, there is a narrow but well-built passage-way to the buildings in the rear. The character of these buildings is not very evident; certainly they did not stand on a line with the church, but at an angle of 25 deg. with that line. Between the church and what appears now to have been the main building in the rear, there was a passage not over 3 feet wide. The main building in the rear of the church is 47 feet 6 inches long, but to this must be added 20 feet more of a special room, which seems to have belonged to it, and which had a beautiful mosaic pavement. Thus the extreme length from the entrance of the church to the (present) east side of this mosaic floor is 140 feet.

On the west side of this mosaic floor, where it joins the wall of the main building, there is a threshold of a single stone 9 feet 6 inches long, with a step 6 feet 9 inches in the clear. This is considerably wider, it will be seen, than the steps, and even the entrance of the church. Several patches of mosaic pavement have been found, but in one place two or three square yards have been preserved, enough to show that the work was extremely beautiful. The coloured tracings resemble those in the church on the Mount of Olives, and on one side are the large Greek letters  $\Theta\epsilon\omicron\upsilon$ . North of this mosaic floor, and of the main building which joins it, and running alongside of both, there is a watercourse or channel cut in the solid rock, which has been levelled to accommodate the buildings above. This can be traced in an east and west line for

a distance of 37 feet; it is 2 feet 3 inches deep, 20 inches wide at the top, and 12 at the bottom. From about the middle of the mosaic floor this channel turns a right angle and runs 20 feet or more to the north; it is possible that it led from the north, and at the point indicated turned a right angle and ran to the west. Piles of stones and *débris* prevent us at present from deciding as to the length of the channel or where it came from. In the bank of *débris*, which rises on the east side of the mosaic floor to a height of 20 feet, there is, about 6 feet above the floor, a watercourse formed of cement, running north and south at right angles to the line of the church and the other buildings, which must have belonged to a much later period. In fact—and this is an interesting circumstance—the mosaic pavement appears to extend under and beyond this canal and the mass of *débris* which is yet to be removed.

In the north-west corner of the room, where the mosaic floor is found, very near the angle (already mentioned) of the rock-cut channel, there is a tomb about 6 feet below the surface or level of the floor. The tomb is 10 feet long and 9 feet wide, and is entered by a doorway 26 inches wide, which is well built, and in the sides of which are grooves for a door to slide up and down. On the wall of the tomb at the east end there is a raised Greek cross, 22 inches long and 13 inches wide. One cannot stand erect in its highest part, but it is to be considered that the loculi are two-thirds full of *débris*, composed chiefly of decayed bones and bits of glass. Those in charge of the excavations have not, up to the present time, allowed the tombs to be cleared out. The loculi are 2 feet in depth.

What Captain Conder speaks of as "vaults north of the church," turn out to be the tops of houses. They are four in number, each 75 feet long by 28 feet wide, and faced the street. They were divided (one or two of them at least) into apartments by means of arches. The lower courses of the walls, to the height of several feet, are of squared stones, while the upper portions and the roofs are of rubble-work, which was covered with a heavy coating of plaster. The threshold of one has been exposed, which is 6 feet in the clear, and the sides of the doorway show excellent work.

Among the ruins there are two sections of marble columns, each 33 inches in diameter. Three large cisterns have been found, two of which were nearly full of water; the mouths of these, which were closed, were many feet below the surface of the ground before the excavations began, hence no one knows how old the water in them may be. Some of the slabs with which the church was paved were 6 feet long by 2½ wide. In the church two pieces of cornice were found, each 8 feet in length. One is entire and quite plain, while the other is broken in the middle. It is upon this that the figures of Christ and His twelve Apostles were painted. They can still be traced, although exposure has nearly obliterated the colours. Pottery and a considerable quantity of broken glass have been found, and some small articles in marble of no great value. The top of a certain block of marble has been formed into a basin, and a hole drilled the entire length of the block for the water to run off.

South of the mosaic floor and of the east end of the main building there is a large underground chamber with seven openings (each the size of a man's body) to the surface. The chamber is 12 feet wide and nearly 20 feet long, but the depth is not yet ascertained, owing to the accumulation of *débris* on the bottom. On the west and north sides a wall of solid rock appears to a depth of 6 feet, showing that the chamber was excavated in part at least in the solid rock. The use of this chamber does not appear evident, unless it may have been a store-room. The place within the city shown as "Peter's Prison" consists of a similar chamber (not dug in the solid rock, however), with similar openings in the ceiling or roof. The ruins extend underground some distance to the east of the mosaic floor, and efforts are being made to purchase the land in that direction, in order to allow of the excavations being extended there. It is almost equally certain that the buildings extended to the south and south-east of the present plot of ground. But the owners of the land are jealous, and everybody is superstitious; consequently excavations must be abandoned, or move with aggravating slowness.

Dr. Selah Merrill, in a note describing a late visit, says that the west wall of what he called the "main building," towards the apse of the church, has been removed and the floor cleared, exposing a fine pavement. This pavement, the threshold before mentioned, and the mosaic floor all belong to one period, and to a structure very much older than the date of the "main building." It puzzled the doctor, because the threshold west of the mosaic floor was not square with the east wall of the "main buildings," but the reason is now clear. Captain Conder says of this church, with such of the ruins about it as were exposed when he was there, that "the whole is evidently of the Crusading period." As regards the church itself this is not clear, and the mosaic floor especially may belong to a time many centuries previous to that era. At the south side of the floor of the "main building" a new mouth to the largest cistern has been discovered; over the mouth there is a thick stone 5 feet in diameter. This was eight sided, and was built against the wall, so that five sides are exposed. The stone was cut in such a way as leave on two of its sides small brackets shaped like the two halves of the utensil called a



"tunnel." It may be of interest to state that this piece of land was offered for sale a few years since, and for a long time went a-begging for a purchaser; at last it was sold for 40 napoleons. During the present year it has passed into the hands of the French for 2,000 napoleons.

### SOCIETY OF ENGINEERS.

THE second ordinary meeting of this society for the present session was held on Monday evening, November 5, at the Westminster Town Hall, where the council of the society have arranged for the holding of the ordinary meetings in future, the society having outgrown the limits of its previous meeting-place, in Victoria Street; the offices, library, and reading-room of the society will, however, for the present be at 6 Westminster Chambers. The president, Mr. Jabez Church, M.I.C.E., F.G.S., occupied the chair, and a paper on "The Dundee Street Improvements and Drainage of Lochee," by Mr. Andrew Greig, was read. The following is a synopsis of the paper:—

The population of Dundee in 1831 was 45,355, and in 1870 it was 118,900. The assessed rental in those years was 78,821*l.* and 370,728*l.* respectively. The town having thus greatly increased in population, and also in mercantile importance, the Police Commissioners, who are also the local authority, obtained an Improvement Bill, in 1871, to enable them to take down various buildings, to construct several new thoroughfares, and to drain the suburb of Lochee, &c. The value of the property bought was 395,000*l.* The principal improvements were in the centre of the town, where several streets were widened, and a new street opened up from Seagate to Meadowside, where stands the Albert Institute, containing the Free Library, Picture Gallery, and Museum. This new street is named Commercial Street, and is the continuation of the street of same name leading from the docks. Buildings, four storeys in height, and consisting of shops, offices, and dwelling-houses, have been erected on the greater part of both sides of the street. The style of architecture is Italian, the corner buildings partaking more of the nature of Italian Renaissance, and the general character of the whole being dignified and massive rather than ornate. These streets have been paved with granite and whin setts.

Lochee is a suburb of Dundee, and has a population of about 12,000. The area to be drained contained over 500 acres. A large portion of the village lay too low to be drained into the sewers at the north end of Dundee. An outfall was therefore constructed from the west end of Lochee to the sewer in Perth Road, thus bringing the sewage to Dundee. Power was obtained in the Bill to purchase land for sewage utilisation and irrigation purposes, but nothing has yet been done in this matter. The outfall is egg-shaped, and built of brickwork in cement. It is 2 miles 1,252 yards in length, and cost, exclusive of surface damage and wayleave, 6,615*l.* The pipe sewers in Lochee are 5 miles 386 yards long, and cost 7,506*l.*



### The London Atmosphere.

SIR,—When reading a paper, on the evening of November 1, at the Parkes Museum, Mr. Ernest Hart used the following words: "The floating particles of soot did great damage to public buildings. Mr. Shaw-Lefevre stated that the damage done to the Houses of Parliament alone was 2,500*l.* a year." As this amount represents a capital of 70,000*l.* invested for the purpose of the restoration of a modern building which living persons saw rise from its foundations, it is, I think, the duty of anyone, in the face of such a stupendous fact, to propose a remedy if he knows of one.

Every architect must wish success to the Smoke Abatement Institute, which is struggling manfully to substitute for us an Athenian instead of a Cimmerian atmosphere in winter—at least, so far as our eyes are concerned. It is highly desirable, however, that the public should not rest satisfied with the abatement, or even with the perfect combustion, of visible and palpable smoke alone. Bad as this nuisance is, there is something behind more noxious, destructive, and costly, though it is not seen. The invisible gases that are slowly corroding alike our finest buildings and our own mucous membranes should be attacked with no less determination than the defiling soot nuisance; and it is the fear that the importance of this part of the question is not quite realised that now prompts me to venture to urge its due consideration.

A little circumstance occurred the other day aptly illustrating this suggestion. The chimney of a certain greenhouse emitted black smoke. The neighbours complained. The owner then substituted coke for coal. The chimney now poured out in bountiful profusion carbonic acid, sulphurous gas, and carbonic

oxide—all perfectly invisible. The complaints were more bitter than before. The first evil was preferred to the remedy, for the palpable smoke could in some degree be excluded from the houses, but exclusion of the invisible mephitic gases was impossible.

It is therefore evident that the use of smokeless fuel, or of ordinary coal-gas itself, for heating purposes (the latter containing 17 grains of sulphur per 1,000 cubic feet), would only very partially purify the London atmosphere, and would quite fail (though Mr. Hart, judging from his quotation, seems to think the contrary) to prevent the destruction of the stonework of our public buildings.

There is something appalling, in more senses than one, in the rapidly-increasing annual consumption of coal in London. It is now 7,400,000 tons. There is at least 1 per cent. of sulphur in it, so that 74,000 tons of this gas are yearly discharged into the air, which gives 200 tons on an average day, but much more on a winter day.

Mr. Hart's telling example, then, rather proves that it is necessary to adopt some means for saving future public buildings from destruction by invisible but not less powerful acids than that smoke abatement is necessary, however much that is to be wished for on its own account.

Here are a few more examples of the relentless work of these powerful enemies. Only recently St. Paul's required a new column to one of its porticoes. Lambeth Palace was recently restored. Westminster Hall and the Treasury are now in the hands of the masons. Of ancient buildings, scarcely an original stone exists of the Abbey, Henry VII.'s Chapel, or the Temple Church. The solution, then, of the problem presented to us by Mr. Hart's lamentable statement of the costly restoration of our most important national edifice, will demand bold and uncompromising action, if the nation is to be saved from a repetition of such an enormous and—as I trust—unnecessary outlay. Mr. Shaw-Lefevre is a very active First Commissioner of Works, and has the courage of his opinions, but if he should determine to introduce structural durability during his ædileship, he will doubtless be glad of external support. One thing at least is absolutely certain, if we are ever to have durable buildings in London. Limestone, dolomite, and sandstone must be vetoed without mercy, for they all absorb moisture, and with moisture various destructive gases in solution. Analysis of old stone shows hydrochloric acid some inches below the surface, and to that extent nothing but silica remains. The cementing ingredients had perished. Terracotta is durable in London if well burnt, but it absorbs soot, and is not a material presenting an appearance good enough to entitle it to use in important national buildings. For this purpose the volcanic rocks—porphyry, granite and serpentine—offer, to my mind, the only worthy material and at the same time the true remedy against future decay. Nearly one hundred years has proved them to be of everlasting durability in the London atmosphere. Bridges, monuments, and architectural details remain as perfect as when the workmen departed. Powerful and ingenious machinery enables us to use them at little, if any, extra cost upon perishable Portland stone, if, like true artists, we only adopt an Italian style of architecture adapted to the nature of the material. It is true that there could be no elaborate carving and moulding, no deeply cut foliage, but there could be richness and splendour of another sort, the charms of colour in tracery, panel, and frieze—indestructible never-fading colour. This would amply compensate for the loss of moulded details, which in London are only so many soot-traps for the defilement of freestone façades; and, last but not least, we should look upon an imperishable edifice exactly adapted in its construction to the unfavourable character of the London climate, and therefore characteristic of this practical and scientific age.

Yours, &c.,

H. T.

### Mr. Blomfield and Sir Edmund Beckett.

SIR,—It is easier to stand up against Sir Edmund Beckett than to overcome him, and I fancy impartial lookers-on will say that in the late encounter, Mr. Blomfield and Mr. Seddon were not the victors. Mr. Blomfield thinks he has not had enough punishment. His circular of October 31 is a challenge, but this time the ground proposed is the professional press, probably because it is supposed to be a softer field in case of accident. The document contains very long and very bitter words, but I doubt if it will bring Mr. Blomfield many backers. Why should men like myself, who are of the rank and file of the profession, wish to see Sir Edmund defeated? He has never done harm to us, and the "Book on Building" is far from being terrible to architects whose work is not done by deputy. On the contrary, I maintain that we should desire the success of Sir Edmund Beckett, for he is the only man living who has the courage to criticise the works of prosperous architects. Criticism is a lost art as regards their work, for the Antisrape Society avoids meddling with new buildings. In town and country papers, we meet with nothing but eulogies when one of their buildings is the subject. There is no longer a "Candidus" like the late W. H. Leeds, who demands and is allowed as large a charter as the winds for his remarks. Painters, although the value of their works in auction-rooms and elsewhere depends upon what is said in newspapers, have to endure every objection that can be



invented by raw youths, or by imaginative geniuses who fancy they are in possession of the secrets of the old masters. The same thing is seen in literature. But it is now held to be flat blasphemy should any one doubt the infallibility of an architect when he attains a prominent position, or appear to forget that Sir Gilbert Scott and Mr. Street were the greatest of architects and the best of men. We are all expected to make their cause our own, and to have no mercy on any one who says that an ill-proportioned reredos could be designed in Mr. Street's office or that drainage was not the forte of Sir Gilbert's young men.

It is not, however, so plain why this should be our duty. So far as I remember, neither Scott nor Street ever acted in defence of their less renowned brethren, and both have said harder things of the ordinary practitioners than has Sir Edmund Beckett. Scott at one time applied to them Mr. Bright's phrase, and denounced the "residuum" who were destroying our beautiful England with their buildings. Remembering this, why should we discard common sense and believe that the Parliament Street offices are a model of planning, effective drainage, and of the Italian style, or that the Albert Memorial exemplifies Mediæval construction? Why should it be thought disloyalty to the profession if one of us should agree with the public and say that the Law Courts are not a success? We are not asked to spare the works of Wren or Jones, of Barry or Cockerell, but we are expected to be awe-struck when we stand before one of Sir Gilbert Scott's or Mr. Street's churches. The reputation of Street and Scott is henceforth to be a sacred thing, with which criticism is not allowed to deal, and we are to imagine that their shades are surrounded by an aureole which may blind irreverent eyes.

Just now another instance of the same kind of beatification is to be witnessed in Birmingham. If I may judge from what has been said in the pulpits of that town, it would seem that the late Mr. Chamberlain is to be enthroned with Sir Gilbert Scott and Mr. Street, and it will be to our profit if we fall down and worship him. But, however heretical I appear to his admirers, I do not believe that Mr. Chamberlain was so wonderful an artist. Forget the political harangues, the addresses at the Midland Institute, the impromptu replies at the Debating Club, and the prestige that was derived from Mr. Ruskin's patronage, then look at his buildings simply as examples of architecture, and I think it will be admitted that they are not better than the buildings which are to be seen in a great many towns, and by architects who are not considered to be shining lights by the clergy and advanced thinkers. One thing is certain, that Mr. Chamberlain's artistic ability was never sought after in places where his political zeal could not be utilised. But he, too, was inflated by success, and esteemed himself as a superior personage among the petty men of architecture. I once heard him lament his lot. He was, he said, oppressed by the amount of work which was thrust upon him because there was not another artist in Birmingham, and he may have been sincere in saying this. There is a good deal of the same kind of stuff in Scott's autobiography. With this example before us, I believe, no matter what Mr. Blomfield may write about "fabrications and darkly-hinted innuendo," there is an advantage in an "Advocatus Diaboli," who will suggest that idols are sometimes formed of clay.

Yours, &c.,  
A PLAIN SPEAKER.

## LEGAL.

High Court of Justice.—November 5 and 6.

TURNEY v. HATTON AND ANOTHER.  
LIGHT AND AIR CASE.

This case involved the simple question as to whether or not a substantial diminution in the light enjoyed on the premises of the plaintiff, who is a needle manufacturer, carrying on business in Tooley Street, Southwark, previously to 1882, had been caused by buildings recently erected by the defendant Hatton, the builder employed by the other defendant, Mr. Brigham, who is the lessee of the property adjoining that of the plaintiff. The case lasted almost the entire day, and in the result the jury, after deliberating half an hour, found a verdict for the plaintiff. Damages 25*l*.

Mr. Justice Cave gave judgment accordingly, refusing to make an order under which each party would have been left to pay his own costs. This he was asked to do by the learned counsel for the defendants, on the ground that the plaintiff had failed in recovering any really substantial sum in the action.

MILLER v. GARDNER.  
THE EMPLOYERS' LIABILITY ACT.

This was a case under the Employers' Liability Act, and had been tried in the Westminster County Court. The plaintiff was in the employ of a firm in St. Martin's Lane, who had a "job" at Whitechapel, the job being to put up an ornamental fabric of iron trellis-work over the door of a public-house to support a sign. The plaintiff, by the direction of the foreman, went to do the work

there, and was met there by the foreman. No scaffolding or ladder had been taken from the premises of the firm (probably on account of the distance), and the foreman told the workmen to go and borrow a ladder, which they did, and the ladder so borrowed was used by the plaintiff under the foreman's direction, and used in safety. On the next day the ladder was again borrowed and used by the plaintiff, he being only told by the foreman "to do his best" about it somehow or other. While the plaintiff was on the ladder the two top rungs or steps of the ladder broke or "started," on which the two sides of the ladder came apart, the ladder gave way, and the plaintiff was thrown down and sustained serious injuries, for which he sued. The judge thought there was no case under the Employers' Liability Act, there being, in his view, no evidence of any "defect" in "works or plant" of the firm by the negligence of the firm or their foreman, and so he directed a non-suit.

Mr. Crispe moved, on behalf of the plaintiff, for a new trial, on the ground that there was a case for the plaintiff, as the ladder borrowed by the foreman's direction in the place of the ladder of the firm was to be considered as their "plant" for the purpose, and that their foreman was bound to see that it was safe before he allowed it to be used, and that there must have been a "defect" in it or it would not have given way as it had done.—The Court, however, thought otherwise, and held the County Court judge right in holding that the plaintiff had no case.—Mr. Justice Grove thought the ladder borrowed could not be considered as "plant," and at all events there was no evidence that there was a defect in it by reason of the negligence of the firm or their foreman.—Mr. Justice A. L. Smith was not clear on the first point, but quite concurred as to the second; and so the non-suit was upheld.

## CHURCH BUILDING AND RESTORATION.

**Northampton.**—The foundation-stone of the church of St. Crispin has been laid. The works included in the present contract comprise the erection of the main portion of the church, which consists of a parallelogram 91 feet by 25 feet inside measure, which forms a nave and chancel under a continuous roof. The north side of the nave will have an arcade of arches provided for the purpose of opening into a north aisle, at some future time; for the present, all these arches, except the westernmost one, will be walled up. One bay, however, of the future aisle will now be erected, and also the ante-room to St. Crispin's Hall, and this ante-room will serve the purpose of a vestry and class-room. The design included a tower and spire of modest dimensions, but only the basement and a few feet of the ground stage will now be built to contain the stairway and coal-store to the heating chamber, which will be under the ante-room. The exterior of the walls will be built of hard local stone, with Bath stone dressings, and the interior will be finished partly with stone and partly with plaster faces. The roof will be of open timber work of wrought pitch pine, and covered on the exterior with Broseley tiles; the junction of the nave and chancel being marked on the exterior with a tall flèche of timber and tile work set upon the ridge, which will serve as a ventilator, and also contain the bell. Accommodation is made in the present undertaking for about 280 persons, and the north aisle, when erected, will accommodate nearly a hundred more. The style of the church is a simple treatment of Early Gothic. The architect is Mr. M. H. Holding, of Northampton, and Messrs. Reynolds & Son, Derngate, Northampton, are the contractors.

**Sherborne.**—The tower of the abbey church is to be restored. It is proposed, after bracing together the other walls, to take down part of the east wall and rebuild in it a new arch, to relieve the existing panelled arch from the pressure. The new arch will rest on the north and south piers, and tie the walls together. On the upper part of the east side the exterior stonework has nearly all perished, but only partially so on the other three sides. The defective facing of the lower part under the slope will be replaced almost stone for stone. On the other sides of the tower the defective work will be made good, and the parapet will be rebuilt in Ham stone, replacing the sound old stones and reproducing the ancient design of the pinnacle tops. Messrs. Carpenter & Ingelow are the architects.

**Selborne.**—The reparation of the south aisle of Selborne Church has been completed, and opened with the harvest thanksgiving. It was necessary to rebuild the east wall, and most of the south wall, which had gone as much as 16 and 18 inches from the perpendicular. The roof had slipped still more, and continued to spread. Every feature has been exactly replaced; and the old surface of the stone-work, except where whitewashed, has been left as far as possible, untouched. In taking down the work, jambs of old windows were discovered *in situ*, together with pieces of tracery heads built into rebuilt parts, and these have been reconstructed in the place of the two modern windows. It was not possible to re-use any of the old oak roof except the braced wall plate on the north side which, though presenting serious difficulties from its crookedness, has been retained and repaired. The work has been carried out under the direction of Mr. Wm. White, F.S.A., the grand-nephew of the great naturalist of Selborne.



**North Wootton.**—A new church, built at the expense of the late Mr. G. D. W. Digby, of Sherborne Castle, has been opened. The old church, which was in a ruinous state and inconveniently situated, has been demolished, with the exception of the tower, where the bells will remain until a tower has been added to the new church. Mr. R. H. Carpenter is the architect, and the work was carried out by Mr. W. Sealy, contractor, of Sherborne.

**Kilpeck, Hereford.**—A new and particularly commodious rectory house has just been completed for this benefice. The style of the building is a plain adaptation of that called after the name of Queen Anne. The walls are of brick construction, and the roofs are covered with Broseley tiles. The principal staircase is of pitch pine, and the chimneypieces of oak, with tile linings and hearths. The architect was Mr. T. Nicholson, F.R.I.B.A., diocesan architect, Hereford, and the builder Mr. James Morgan, of Kington, the total amount of whose contract was 1,365*l*. Kilpeck is widely known for its unique Norman church—a building of intense interest to the architect, antiquary, and ecclesiologist; the more especially as it has escaped much alteration, and has been but little mutilated by the hands of the restoring architect.

### NEW BUILDINGS.

**Market Hall, Burton-on-Trent.**—This building was lately opened by the mayor. The area is close upon half an acre. The front or west side is two storeys high, and comprises four shops, superintendent's office, and market and office entrances on the ground floor, a suite of three offices and room for care-taker on the first floor; and the market hall, which is at the rear, and attached to this front two storey building, with a floor area available for stalls of 1,090 yards superficial. This portion has an iron and glass roof in three spans, supported on iron columns and girders. One-half the floor space is set apart for thirty-two fixed stalls in groups of four, divided by avenues. The other half is fitted with fixed and movable stands and seats, to be used for the sale of eggs and butter. Opening into and on three sides of the hall are twenty fireproof shops. There is a gallery on three sides of the hall, approached from the floor of the market by a wide staircase. Ventilation is secured by having the upper portions of each of the three roofs by which the building is spanned fitted with continuous open louvres. The style of the architecture is Renaissance. The contracts amounted to about 12,000*l*. They were secured by Messrs. Chamberlain Bros. for building, the executors of Mr. Mason for woodwork, Messrs. Gough & Felgate for ironwork, Mr. Ryle for plumbing and painting, and Mr. Roddis for carving. The architects of the building are Messrs. Dixon & Moxon, of Barnsley.

**King's Lynn, Stanley, and St. Margaret's Libraries.**—The mayor of King's Lynn has laid the memorial-stone of this building, which the corporation are erecting for the reception of the Stanley Library, the gift of the present Earl of Derby when Member of Parliament for the borough; and also the St. Margaret's Library, a collection of very valuable books of the thirteenth and fourteenth centuries. The style of architecture is Classic, of the Roman-Doric order. The front elevation will be faced with red pressed bricks, and the stone ornamentation of red Dumfries stone. Over the centre bay will be a device in stone, upon which will be carved in relief the Stanley and borough arms. The new building will contain a library 52 feet by 30 feet, a reading-room 21 feet by 14 feet, and the St. Margaret's Library 17 feet by 16 feet. There will be also a committee-room, lavatories, stores, &c. Messrs. William Adams & Son, of King's Lynn, are the architects, and Mr. W. H. Brown of the same place is the builder.

### SCHOOL BUILDINGS.

**Cockermouth.**—The foundation-stone of the new Board school has been laid. The ground floor contains infant school with classrooms, entrance-room, lavatory, &c. The upper floor is devoted to the boys' school, accommodating 240 boys. The infant school is 42 feet by 22 feet, and will accommodate 214 children. The schools will be heated with Musgrave's (Belfast) stoves, and will be ventilated on the Tobin's principle, with five of Boyle's cowl on the roof to extract the foul air. The walls are to be built of stones from the Brigham quarries, and in each room will be a cement dado 5 feet high. The total cost of the school is estimated to be about 3,000*l*. Mr. Borrowdale, of Cockermouth, has the contract, and Mr. R. S. Marsh, of Cockermouth, is the architect.

**Leicester.**—A new Methodist chapel and schools have been opened in Belgrave Gate. The building is constructed of red brick with Bath stone dressings. The main entrance to the chapel is from Belgrave Gate. It is capable of seating 1,000 persons, with additional provision in case of necessity. At the back of the chapel is a large school-room for girls and three class-rooms for separate teaching, with other offices and the heating apparatus. On the basement is a boys' school-room capable of accommodating 500 children, an infants' school with room for 150, besides class-rooms. Minister's and stewards' vestries. The architect was Mr.

Edward Burgess, of London and Leicester; the clerk of the works, Mr. W. Cayless, Leicester; and the contractors, Messrs. W. & A. Rudkin, of Leicester.

### GENERAL.

**Mr. Havell**, from the South Kensington School, has been appointed superintendent of the Madras School of Art. There are now four of the Department masters attached to the India Office.

**The Burlington Fine Arts Club** propose to exhibit examples of ancient Greek and Greco-Roman art from private collections.

**Mrs. John Collier** has presented to the General Infirmary and Eye Institution, Gloucester, *The Rehearsal*, the painting recently exhibited by that lady at the Grosvenor Gallery.

**The Hawick Fine Art Exhibition** has just been closed. The sum realised by the sale of pictures amounted to 1,600*l*.

**Mr. Wilfrid Meynell** has presented to the Manchester Art Museum an artist's proof copy of M. Rajon's etching of Cardinal Newman's portrait by Mr. Oulless.

**Mr. Ford Madox Brown** on Monday delivered a lecture to the members of the Literary and Philosophical Society, Newcastle-on-Tyne, on "The Connection between the Fine Arts," and a second lecture on Wednesday on "The Idea in Painting."

**The Church of St. John, Carlisle**, has been enriched by a painted window from the studio of Mr. Taylor, of Berners Street. It is the gift of Dr. Hodgson, and an illustration of the parable of the Good Samaritan.

**A Reredos** was dedicated at All Saints, Stoke Newington, on the 2nd inst. It was designed by Mr. F. T. Dollmans.

**The Mayor of Sheffield** has received a letter from Professor Ruskin practically accepting the proposals of the mayor for the establishment of the St. George's Museum at Sheffield. The town is to erect a building, all art treasures, books, &c., placed in which will be the property of the town for ever. The building is to be vested in trustees, and the management is to be in the hands of Professor Ruskin and his successors, who will have power to lend, for limited periods, certain of the objects in the museum.

**Mr. J. D. T. Niblett**, who died lately at Haresfield Court, Gloucester, was a local antiquary and an amateur architect. He copied the designs on the most interesting of the ancient tiles in Gloucester Cathedral, and superintended the production of the facsimiles used in the restoration. He designed the memorial brasses placed on the tombs in Tewkesbury Abbey. Mr. Niblett was for a time the secretary of the Gloucester School of Art.

**A Part of the Atrium Vestæ** in the Roman Forum has been excavated, and it is esteemed to be an important topographical discovery. The portion uncovered reveals three large pedestals *in situ*, at equal distances apart, and on them are long honorary inscriptions to three of the superiors of the Vestal Virgins, one of whom had ruled the Order for twenty years. For the moment, however, there is some doubt as to whether these pedestals occupy their original positions.

**Shrewsbury School** is to be converted into a county museum and free library.

**Mr. Carrick**, city architect, Glasgow, has been presented with an honorarium of 300 guineas, in recognition of his services in the preparation of the plans of the new Municipal Buildings, and as joint assessor in the selection of the competitive designs.

**A Large Hay Store and Pressing Establishment** is being constructed at the western end of the Royal Dockyard, Woolwich, close to the dry dock and basin. Its dimensions are 202 feet long by 89 feet wide, with nineteen doors, each 10 feet 6 inches by 11 feet 6 inches, with wooden frames and corrugated iron panels. The roof is supported by thirty-two iron columns 17 feet in height, and is covered with slates with glass ventilators on Rendle's patent system.

**The Remains** of one of the oldest bridges in the world have been met with by engineers at Mayence—no other than the bridge erected by Charlemagne over the Rhine near the close of the eighth century. It rested on twenty-eight buttresses, and was eventually struck by lightning and burnt down to the level of the water. The engineers have been busy taking away its remains, and have already removed over fifty piles of 5 to 6 yards in length. The timber is well preserved, though nearly 1,100 years old; so well, indeed, that it is still fit for building purposes; while the iron, which was rivetted to the posts, is also capable of being used, being covered by only a thin layer of rust.

**The Panama Canal.**—A despatch from Panama, dated October 26, gives an account of the progress of the work on the Panama Canal. The total length of the canal will be 74 kilometres, from the Atlantic to its mouth in the Pacific. It is divided into twelve sections, in which are employed daily 30 steam excavators, 40 locomotives, and 800 tip-wagons. There are 90,000,000 cubic feet to be excavated. The grand cutting, about two-thirds of which has already been excavated, is that between Obispo and Paraiso. The number of men employed upon the work exceeds 10,000, and the excavations up to October 15 amounted to more than 2,500,000 cubic metres. The working force will soon be augmented, and will form a total of 15,000 men.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, NOVEMBER 10, 1883.

### EDITORIAL NOTICES.

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*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

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### COMPETITIONS OPEN.

**BIRKENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRIDGEND.**—Nov. 20.—Plans are required for Disposal of Sewage by Filtration in the most economical and beneficial manner. Mr. T. Stockwood, jun., Clerk to the Local Board, Bridgend.

**BRISEBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of

the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

### CONTRACTS OPEN.

**ABERDEEN.**—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10*s*. 6*d*. to Mr. John Otto Macqueen, 19 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

**ACTON.**—Nov. 13.—For Supply of Blue Guernsey Granite, Kentish Flints, and Repair of Private Streets. Mr. C. Nicholson Lailley, C.E., Surveyor to the Local Board, Acton, W.

**ACTON, CHESHIRE.**—Nov. 15.—For Construction of Works of Water Supply for the Township. Mr. H. J. Bennett, Surveyor, Norwich.

**BANBURY.**—For Iron Palisading and Stone Kerbing to enclose the Cross. Mr. W. E. Mills, Architect, Banbury.

**BASSENTHWAITE.**—Nov. 10.—For Additions and Alterations to Scarness Cottage, for Sir H. R. Vane. Mr. George Richardson, 18 Bank Street, Carlisle.

**BECCLES.**—Dec. 7.—For Building Temporary Bridge, Removing old and Building new Bridge. Mr. F. S. Rix, Clerk to the Beccles Navigation Commissioners, Beccles.

**BLACKBURN.**—Nov. 12.—For Execution of Street Works. Mr. J. B. McCallum, Borough Engineer, Victoria Street, Blackburn.

**BOULTHAM.**—For Forming Streets. Messrs. Goddard & Son, Surveyors, Lincoln.

**BURNLEY.**—Nov. 14.—For Supplying 700 tons of Cast-iron Socket Pipes, 15 inches diameter, and for Carting, Laying, and Jointing 9½ miles of 24-inch and 15-inch Pipes. Mr. Edward Filliter, C.E., 16 East Parade, Leeds.

**BURNLEY.**—Nov. 15.—For Building the Burnley and District Hospital. Messrs. William Waddington & Son, Architects, 5 Grimshawe Street, Burnley, and 25 Cross Street, Manchester.

**BURRADON.**—Nov. 10.—For Building Methodist Chapel. Mr. Green, Colliery Office, Burradon, Northumberland.

**CHATTERIS.**—Nov. 15.—For Painting Exterior Wood and Ironwork of The Limes. Mr. John Nix, Holwood House, Somersham.

**CHEVINGTON.**—Nov. 17.—For Alterations and Additions to the Chevington North Schools, Broomhill. Mr. William Webb, Clerk to the Chevington School Board, Newgate Street, Morpeth.

**COVENTRY.**—Nov. 10.—For Alterations and Additions to Premises, Lower Ford Street. Messrs. G. & I. Steane, Architects, 22 Little Park Street, Coventry.

**CROYDON.**—Nov. 19.—For Laundry, Engineering Fittings, Engine, Boilers, &c., for the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon. Messrs. Berney & Monday, Architects. Mr. Henry Ward, C.E., Engineer.

**CROYDON.**—Nov. 19.—For Plans for Cooking Apparatus, &c., for 643 Persons, at the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**CROYDON.**—Nov. 19.—For Gasfittings at the New Infirmary, Mayday Road. Specification by Messrs. Berney & Monday. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**DUBLIN.**—Nov. 20.—For the Erection of proposed Public Baths and Wash-house at the corner of Poolbeg Street and the new street to the Swivel Bridge. Mr. D. J. Freeman, City Architect. Also for Engineer's and Plumber's Work connected with the proposed Public Baths and Wash-house. Mr. D. J. Freeman, City Architect, 34 Dawson Street, Dublin.

**DURHAM.**—Nov. 17.—For Building Industrial Schools at Earl's House Farm. The County Architect, Durham.

**EASTBOURNE.**—For Building Town Hall and Municipal Buildings. Mr. C. Tomes, Surveyor to the Local Board, Eastbourne. Mr. Tadman Foulkes, Architect, 100 Colmore Row, Birmingham.

**EDMONTON.**—Nov. 13.—For Building Cemetery Chapel, Mortuary, Entrance Gates, &c. Mr. F. J. Ricketts, Surveyor to the Local Board, Church Street, Edmonton.

**ELLAND.**—Nov. 17.—For Building Combing Shed at Albert Mills. Messrs. Horsfall & Williams, Architects, Post Office Buildings, Halifax.

**FLEETWOOD.**—Nov. 24.—For Building Post Office and Residence. Mr. C. Pearson Shaw, Architect, 37 St. Peter's Place, Fleetwood.

**FRASERBURGH.**—Nov. 13.—For Construction of Pipe Sewers in Broadsea Village (900 yards). Messrs. Jenkins & Marr, C.E., Aberdeen.

**FULHAM.**—Nov. 14.—For Paving Portion of Broadway and Brook Green Road with Wood (Wood Blocks found by the Board). Mr. Thomas E. Jones, Clerk to the Fulham Board of Works, Broadway House, Hammersmith.

**GATESHEAD.**—Nov. 10.—For Making Swimming Bath, Gymnasium, Cricket Pavilion, and Workshops at High School for Boys. Messrs. Oliver & Leeson, Architects, Bank Chambers, Mosley Street, Newcastle-on-Tyne.

**GOSFORTH.**—Nov. 12.—For Building Wesleyan Chapel. Mr. J. J. Lish, Architect, Scottish Chambers, Grainger Street West, Newcastle-on-Tyne.

**GRIMSTON.**—Nov. 13.—For the Erection of Three Bridges near Grimston, on the Wilts and Somerset Branch Railway. Plans and Specification at the Office of the Engineer, Reading Station.

**HANLEY.**—For Building Hotel, Refreshment Room, and Shops in Mill Street. Messrs. R. Scrivener & Sons, Architects, Howard Place, Hanley.

**HANLEY.**—For Plumbing, Glazing, Painting and Gas-fitting for Hotel, as above. Messrs. R. Scrivener & Sons, Architects.

**HELLESDON.**—Nov. 12.—For Construction of one or more Water Tanks at the Asylum, Supplying and Fixing Engine and Pumps. The City Surveyor, Municipal Buildings, Norwich.

**HEYWOOD.**—Nov. 13.—For Alterations and Additions to proposed Municipal Buildings. Mr. James Diggle, Borough Engineer, Miller Street, Heywood.

**HOVE.**—Nov. 22.—For the Construction of a Sea Wall, Inclines, Steps, and Timber Groynes, on the East Fore-



shore of the Town. Sir John Coode, Consulting Engineer, 5 Westminster Chambers; and Mr. E. B. Ellice-Clark, Engineer to the Hove Commissioners, Town Hall, Hove.

HYTHE.—Nov. 10.—For Extension of Wesleyan School Premises. Mr. W. P. Webster, Head Street, Colchester.

IPSWICH.—Nov. 10.—For Building Six Houses, Rosemary Lane. Mr. William Eade, Architect, Post-Office Chambers, Ipswich.

IRVINE.—Nov. 17.—For Building Shed and Offices at Irvine Academy. Mr. John Armour, jun., Architect, Irvine.

KEIGHLEY.—Nov. 10.—For Taking Down and Rebuilding portion of Messrs. Summersale's Works. Mr. J. B. Bailey, Architect, North Street, Keighley.

KEIGHLEY.—Nov. 16.—For Boundary and Garden Walls, Highfield Estate. Mr. J. B. Bailey, Architect, North Street, Keighley.

KENDAL.—Nov. 16.—For Building Residence, Stabling for Fifteen Horses, Carriage Houses, Barn, Loose Boxes, &c., Windermere Park. Mr. Eli Cox, Architect, Government Offices, Highgate, Kendal.

KENSINGTON.—Nov. 15.—For Painting, Cleansing, and General Repairs at Portions of Workhouse and Infirmary, Marles Road. Mr. Arthur Baker, Architect, 14 Warwick Gardens, Kensington.

LEEDS.—Nov. 16.—For Building Shed. Messrs. Wilson & Bailey, Architects, 35 Park Square, Leeds.

LEEDS.—For Warming and Ventilation of Board Schools. Messrs. Adams & Kelly, Architects, Leeds, and 5 Westminster Chambers, Victoria Street, London.

LONDON.—Nov. 20.—For Building Five Blocks of Artisans' Dwellings, Petticoat Square, Middlesex Street. Mr. Henry Blake, Sewers' Office, Guildhall.

LONDON.—Nov. 20.—For Construction of Sewers, &c. Mr. Henry Blake, Sewers' Office, Guildhall.

LONG EATON.—Nov. 12.—For Street Paving, &c. Mr. John Sheldon, Surveyor, Public Offices, Main Street, Long Eaton.

MALDON.—Nov. 12.—For York Stone Paving, Market Hill. The Borough Surveyor, Maldon.

MARKET HARBOUR.—Nov. 15.—For Construction of Sewers, and Ventilation of existing Sewers. Mr. J. W. Witts, Surveyor to the Rural Sanitary Authority, Market Harborough.

MIDLAND RAILWAY.—Nov. 15.—For Erection of Additional Shed for Stores Department at Derby. Drawings, &c., at the Engineer's Offices, Derby Station.

NEWMARKET.—Nov. 17.—For Building Engine, Boiler, and Pump House, with Chimney Shaft, Settling Tanks, Cottage and Boundary Wall; Supplying and Erecting Engine, Boilers, &c.; Construction of Covered Reservoir, Laying Cast-Iron Pipes, &c. Messrs. Edward Easton & Co., Engineers, 11 Delahay Street, Westminster, S.W.

NORTH-EASTERN RAILWAY.—Nov. 14.—For Construction of the Alnwick and Cornhill Branch Line in Two Contracts. Plans at the Engineer-in-Chief's Office, Central Station, Newcastle-on-Tyne.

PARKSTON.—For Building Twelve Small Houses at Parkston, near Harwich. Messrs. Whitmore & Reeves, Architects, 14 Devonshire Square, Bishopsgate, E.C.

PETERBOROUGH.—Nov. 22.—For the Supply and Delivery of 165 tons of Cast-iron Socket Pipes and 5½ tons of Special Castings, 42 Sinter Valves and Surface Boxes, and 50 Hydrants and Surface Boxes. Mr. W. Matthews, C.E., Borough Engineer, Peterborough.

POPLAR, E.—Nov. 14.—For Sinking an Artesian Well, for the Supply of Water to the Public Baths and Wash-houses, All Saints, Poplar, E. Mr. George Wooldridge, Clerk to the Commissioners.

PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

RAWMARSH.—Nov. 13.—For Construction of new Street. Mr. J. W. Bellamy, Clerk to the Local Board, Rawmarsh.

ST. ALBANS.—Nov. 17.—For Construction of Three Roads, Holywell Meadow Estate. Messrs. Harding & Eve, Surveyors, St. Albans.

ST. COLUMB.—Nov. 10.—For Building Schoolroom. Rev. H. L. Ventris, The Rectory, St. Columb.

ST. GERMANS.—Nov. 29.—For Building Mission Room at Dowderry, near Hassenford. Mr. J. Piers St. Anbyn, Architect, Lamb's Buildings, Temple, London.

ST. HELENS.—Nov. 13.—For Extensive Additions to Passenger Station. Mr. S. B. Worthington, Engineer, Victoria Station, Manchester.

ST. HELIER.—Nov. 23.—For Erection of Pedestal in Granite, and Placing three Figures of Monument "Don." Mr. W. B. Godfrey, 17 Broad Street, St. Helier, Jersey.

STRATFORD.—Nov. 13.—For Erecting Block of School Buildings in Carpenter's Road. Mr. J. T. Newman, Architect, 2 Fen Court, E.C.

SUNDERLAND.—Nov. 12.—For Extending Iron Roof over Market. The Borough Surveyor, East Cross Street, Sunderland.

SUNDERLAND.—Nov. 14.—For Building Shop and Offices, High Street. Mr. William Bell, Architect, Central Station, Newcastle-on-Tyne.

SWANSEA.—Nov. 16.—For Supply of Cast-iron Pipes. Mr. Ralph Henry Wyrill, C.E., Borough Engineer, Swansea.

SWINDON.—Nov. 10.—For Supplying 1,000 9-inch Stone-ware Socket Pipes. Mr. J. C. Townsend, Clerk to the Local Board, 42 Cricklade Street, Swindon.

THORNBURY.—Nov. 30.—For Providing and Laying Water Mains (500 yards). Mr. F. C. Williams, High Street, Thornbury.

WALTHAM CROSS.—Nov. 13.—For Construction of Sewage Tanks, Screening Chamber, Engine and Boiler Houses, Chimney, &c. Mr. J. Mansergh, 3 Westminster Chambers, Victoria Street, Westminster.

WALTHAMSTOW.—Nov. 22.—For Execution of Street Works. Mr. G. B. Jerram, Surveyor to the Local Board, Town Hall, Walthamstow.

WANDSWORTH.—Nov. 13.—For Making-Up Bendon Valley. Mr. A. A. Corsellis, Clerk to the Wandsworth Board of Works, Battersea Rise, S.W.

WISBECH.—Nov. 17.—For Laying Cast-iron Water Pipes (6,750 yards), &c. Messrs. Edward Easton & Co., 11 Delahay Street, Westminster, S.W.

WOODBIDGE.—Nov. 15.—For Main Drainage and other Sanitary Works for the Suffolk Lunatic Asylum, Melton. Messrs. Hodson, Price & Hodson, C.E., Loughborough.

WOOLWICH.—Nov. 13.—For York Paving (10,000 feet) and Tar Paving. Mr. H. O. Thomas, Surveyor to the Local Board, Town Hall, Woolwich.

WREXHAM.—Nov. 10.—For the Construction of Service Reservoir and Filter Beds at Gronwen, near Wrexham. Mr. Frederick Storr, Engineer, Waterworks Offices, 5 Charles Street, Wrexham.

WREXHAM.—Nov. 10.—For Construction of Service Reservoir at Gronwen. Mr. Frederick Storr, Engineer, Waterworks Offices, Wrexham.

## TENDERS.

### AMPTHILL.

For the Erection of Wesleyan Chapel, Ampthill. Mr. CHARLES BELL, F.R.I.B.A., Architect. Quantities by Mr. Henry Lovegrove, 26 Budge Row, E.C.

Orchard, Banbury	£3,975 0 0
Twelvevrees, Biggleswade	3,697 0 0
Smith & Son, Norwood	3,697 0 0
Yerrell, Leighton Buzzard	3,593 0 0
Bunn, Luton	3,495 0 0
Wade & Edey, St. Neots	3,420 0 0
Poster, Bedford	3,405 0 0
Harrison, Bedford	3,317 0 0
Cox, Luton (accepted)	3,105 0 0

### BRECONSHIRE.

For Building Pair of Cottages at Three Cocks, Breconshire. Messrs. C. & G. BUTCHER, Architects.

Price, Velindre, Three Cocks	£412 0 0
Price, Hay	410 0 0
Jenkins, Brecon	410 0 0
Owen, Llandrindod	328 0 0
Parry & Davies, Talgarth	310 0 0

### BRENTWOOD.

For Relaying Sewer in the High Street, Brentwood, for the Billericay Union Rural Sanitary Authority. Mr. MARCUS FLOCKTON, Architect, Brentwood.

Strachan, Wood Green	£382 0 0
Wood, Chelmsford	299 0 0
Green, Dartford	280 0 0
Seal, Navestock	276 10 0
NICHOLSON, Southend (accepted)	274 15 0
Surveyor's estimate	300 0 0

### DARENTH.

For Engineering and Gasfitting Work to the Recreation Hall at the Asylum for Imbeciles, Darenth, near Dartford, Kent, for the Managers of the Metropolitan Asylum District. Messrs. A. & C. HARSTON, Architects, 15 Leadenhall Street, E.C.

Clark, Bunnett & Co.	£615 0 0
Bushby	581 0 0
J. & F. May	575 0 0
Clements & Co.	530 0 0
Strode & Co.	487 0 0
Stidder & Co.	376 0 0
GARDNERS (J. & C. Christie) accepted	320 0 0

### DENBIGH.

For Alterations to Baptist Chapel, Denbigh. Mr. RICHARD DAVIES, Architect, Bangor.

Hughes, Denbigh	£450 0 0
Whitley, Rhyl	430 0 0
Evans, Denbigh	411 13 0
Parry, Denbigh	405 0 0
Evans, Dolyddalen	379 13 8
Garner, Rubbin	340 0 0
BARTLEY, Denbigh (accepted)	290 0 0
Sayle, Denbigh	285 10 0

### EGREMONT.

For Alterations and Additions to Public Offices, Church Street, Egremont, for the Wallasey Local Board. Bellis, Liscard.

W. & J. Varty, New Brighton.	
Burrows, Egremont.	
Andrew & Mills, Liscard.	
Forde, Birkenhead.	
E. & R. McGeach, Seacombe.	
Readdie, Liverpool.	
Haughton, Manchester.	
Ellis, jun., Seacombe.	
LEGGE, Son & Co., Birkenhead, (accepted).	£1,200 0 0

### ENFIELD.

For Building House for Mr. Herbert Livermore. Mr. W. GILBEE SCOTT, A.R.I.B.A., Architect, 102 Guilford Street, Russell Square, W.C.

FAIRHEAD (accepted)	£1,200 0 0
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### GLASGOW.

For Additions to Bellgrove Bakery, Glasgow, for Mr. Wm. Beattie. Mr. JAMES M. MONRO, Architect, Glasgow.

Accepted Tenders.

Gibb & Sons, builder.	
Lightbody, joiner.	
M'owat & Son, slater.	
Philips & Bruce, plumber.	
A. & P. Steven, engineer.	
Christie & Smith, ironfounder.	
Total	£1,843.

### HEREFORD.

For Four Model Houses, Ryeland Estate, Hereford, from the designs and under the direction of Mr. T. NICHOLSON, F.R.I.B.A., Architect, Hereford.

HALES, Whitecross Road (accepted).	
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### INNISHANNON.

For Erection of Glebe House at Innishannon, Co. Cork. Mr. W. H. HILL, Architect, 15 Marlboro' Street, Cork.

Evans, Cork	£1,750 0 0
Roberts, Cork	1,540 0 0
Hill, Cork	1,529 0 0
LEAHY, Kinsale (accepted)	1,325 0 0

### LINCOLN.

For the Erection of Coffee Palace and Working Men's Dining Hall, for Messrs. Robey & Co., Globe Works, Ripon Street, Lincoln.

H. S. & W. Close	£1,525 0 0
J. M. Harrison	1,498 0 0
Wright	1,497 0 0
Martin & Sims	1,454 0 0
J. B. Harrison	1,449 0 0
CROSBY & SONS (accepted)	1,265 0 0

### LONDON.

For Cabinet, Bar-fittings, &c., at the Princess of Wales Public-house, Grove Street, Deptford, S.E., for Mr. Frank Barnes. Mr. HENRY ROBERTS, Architect and Surveyor, 113 Lewisham Road, S.E.

#### Cabinet and Bar-fittings.

Lascalles & Co.	£284 2 6
Hubble & Trott	270 0 0
TAYLOR (accepted)	248 0 0

#### Counter and Partitioning.

#### HEATH (accepted).

#### Outside Lamps.

#### Biggs & Co. (accepted).

For New Warehouse, Bloomsbury, for Mr. Heaton.

Colls & Son	£3,100 0 0
Tongue	2,950 0 0
Perry & Co.	2,870 0 0
Elliott & Co.	2,858 0 0
Green	2,839 0 0
Martin, Wells & Co.	2,800 0 0
Lawrence & Son	2,770 0 0
Rider & Son	2,768 0 0
Conder	2,695 0 0

For the Erection of New Hall and Buildings for the Trustees of the Tower Hamlets Mission. Messrs. W. A. BOULNOIS & A. E. WARNER, Architects. Quantities supplied by Messrs. Williams & Gritten.

Holland & Hannen	£15,987 0 0
Hall, Beddall & Co.	15,940 0 0
Holland	15,530 0 0
Brass	15,487 0 0
Shaw	15,484 0 0
Perry & Co.	15,400 0 0
Bangs & Co.	15,375 0 0
Conder	15,280 0 0
Kirk & Randall	15,254 0 0
Trollope & Sons	15,200 0 0
Higgs & Hill	14,784 0 0
Ashby & Horner	14,780 0 0
Morter	14,723 0 0
Clarke & Bracey	14,643 0 0
Ashby Bros.	14,587 0 0
Lawrance	13,631 0 0

For New Premises in Eastcheap for Sir H. W. Peek, Bart., M.P. Mr. ALEXANDER PEEBLES, F.R.I.B.A., F.S.I., Architect. Quantities by Mr. W. E. Stoner.

#### Building.

Conder	£22,315 0 0
Holland & Hannen	21,787 0 0
Mowlem & Co.	20,490 0 0
Hall, Beddall & Co.	20,240 0 0
Trollope & Son	19,971 0 0
Brass	19,383 0 0
Chappell	19,381 0 0

#### Alternative Works.

Holland & Hannen	£3,536 0 0
Conder	3,535 0 0
Trollope & Son	3,332 0 0
Hall, Beddall & Co.	3,330 0 0
Brass	2,998 0 0
Chappell	2,998 0 0
Mowlem & Co.	2,855 0 0



LONDON—continued.

For First Block of Residential Chambers, to be Erected in Red Lion Square and Theobald's Road, Bloomsbury, for the St. George's Residential and General Building Company, Limited. Mr. CHAS. H. WORLEY, Architect Quantities by Mr. R. C. Glead.

Downs	£9,477	0	0
Mattock Bros.	9,390	0	0
Patman & Fotheringham	8,673	0	0
Lawrance & Sons	8,530	0	0
Scrivener & Co.	8,529	0	0
Parker	7,990	0	0
GREEN (accepted)	7,836	0	0

STAINTON.

For Erection of Farm Buildings at Stainton. Mr. J. TAYLOR SCOTT, Architect, Carlisle.

Accepted Tenders.  
Hutton, builder.  
Hill, joiner.  
Nanson, slater.  
Thomson & Sons, plumber.  
W. & R. M. Hill, painter.

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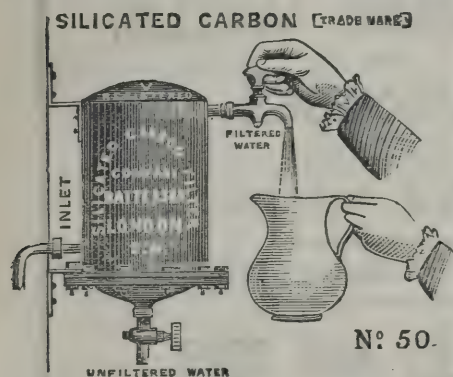
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Walker & Sons, Wirksworth	£1,265	0	0
Farnworth & Sons, Cromford	1,252	10	0
Griffiths, Gloucester	1,230	3	0
Green, Rotherham	1,200	16	0
Hilton & Sons, Birmingham	1,194	0	0
Waterfield, Wirksworth	1,175	0	0
Jevons, Dudley	1,096	4	10
Walker, Matlock	1,085	0	0
Coates & Son, Dewsbury	1,016	11	0
Law, Kidderminster	935	0	0
Gould, Newport	880	0	0
Evans Bros., Wolverhampton	854	9	8
Ward, Leicester	840	5	0
Palmer, Birmingham	795	0	0
Smith, Newcastle-on-Tyne	764	13	0
Horton, Brierley Hill	750	0	0
Dawson, Bury	743	0	0
Dovene & Son, Sowerby Bridge	733	13	0
Frith, Chesterfield	733	10	3
Mathews, Stockport	720	0	0
Harris, Shrewsbury	690	0	0
Young & Co., Southampton (accepted)	663	4	6
Biggs, Handsworth	544	16	0

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Rees, Swansea	£1,419	0	0
Jenkins, Swansea	1,400	0	0
Williams, Merthyr Tydfil	1,230	0	0
Jones, Merthyr Tydfil	1,225	0	0
Foster, Aberpenny	1,140	0	0
JENKINS, Merthyr Tydfil (accepted)	1,100	0	0

STAINLAND.

For Works to Wesleyan Chapel, Stainland, near Halifax  
Mr. T. L. PATCHETT, Architect, Halifax.

Accepted Tenders.

W. & S. Thornton & Son, Huddersfield, heating apparatus	£100	0	0
Taylor & Helliwell, Stainland, mason and bricklayer work	55	10	0

Decoration and Ventilation unlet.

SUTTON.

For Additions to Park House, Sutton, Surrey, for Mr. W.  
Appleton. Mr. HERBERT D. APPLETON, A.R.I.B.A.,  
Architect, 157 Wool Exchange, E.C.

Shurmur	Lye	Potter.
Humphris	Robinson.	

SOUTH, Kennington (accepted).

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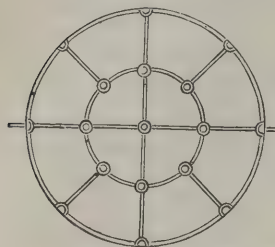
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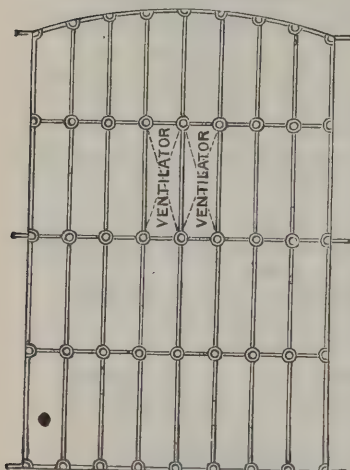
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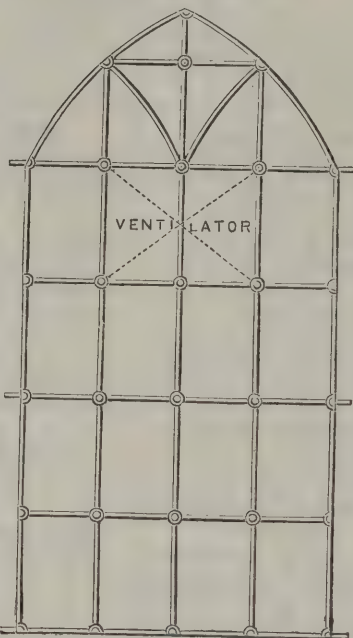
CABLE LIGHT



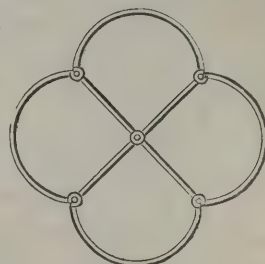
CLOSE BAR SASH (obviating use of Window Guards)

The Patentee begs to call particular attention to the great strength of this construction. The Bars and Bosses, being of malleable wrought iron, form an exceedingly firm joint at the intersection of bars. They are durable, and of light appearance, the Bosses being small and not unsightly. They can be made at very short notice, and at the price of an ordinary cast iron sash.

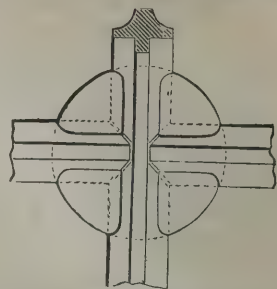
PRICES UPON APPLICATION.



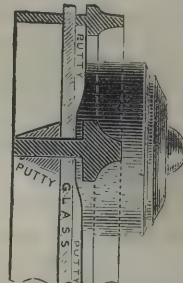
ORDINARY WAREHOUSE AND SCHOOL SASHES.



CABLE LIGHT.

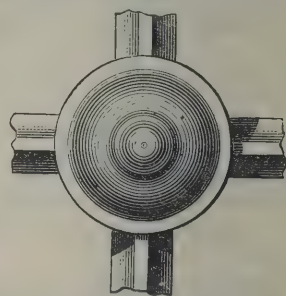


Back view of Boss, full size.



Section through Boss, full size.

These can be glazed flat, like ordinary wooden sashes, without the corners of the panes being chipped off.



Front view of Boss, full size. Obscuring no appreciable light.

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# The Architect.

## THE CHANGE OF ARTISTIC FEELING.



T seems probable enough that we shall find ourselves before long involved in a vital revolution of taste, when possibly Greek may come to the front again. We do not say this because a Lord Mayor is heard quoting HOMER in the original at a Guildhall banquet. Nor do we place too much reliance upon the circumstance that a Lord Chief

Justice, just returned from the land of free citizenship, speaks his mind plainly, "as a free citizen of the republic of taste," about the Gothic Law Courts, roundly declaring the building to be "uncharacteristic, inappropriate, and inconvenient"—of course because of its Mediæval style. The very remarkable furniture-fashion which has found its way at present into a certain ascendancy in English architecture under the name of "Queen Anne"—more properly Low Dutch, and sometimes very low Dutch indeed—shows no sign of turning out to be anything better than the stepping-stone we have all along regarded it to be, between the picturesque of the spurious secular Gothic of a few years ago, and a better picturesque, it is to be hoped, which will presently be the precursor of a calmer method, wherein the picturesque may at length be dispensed with. It is not unlikely that the competition for the new War Office—if the multitudinous competitors insist, as they ought to do, upon the unrestricted public exhibition of the designs—may produce a few specimens of advanced Classical work—not necessarily the "selected"—to serve as way-marks of progress; the Glasgow competition having entirely failed, for various reasons beyond the competitors' control, to produce this effect. The President of the Architectural Association, touching upon these competitions the other night, significantly expressed regret that the Mediæval style seems to be losing its vantage-ground, thinking, no doubt, of the difficulty in which competitors are placed at the present moment who cannot turn quickly enough from the thirteenth century in Kentish rag to the eighteenth in red brick; but the President of the Architectural Association may well be allowed to be sympathetic, although we are inclined to think he will in this case sigh in vain for any return of the palmy days of the mode he mourns. On the whole our architects are very much in the condition just now of a crew of some old-fashioned sort of mariners in a calm, whistling for the wind to blow from no matter what quarter, and some of them tugging a little wildly at the oars—wildly and to no purpose.

What will be the effect of the coming change of sentiment upon the question of the protection of ancient buildings it is impossible to say so soon; but there is a new hazard in the air, namely, this—that the national and parliamentary agitation which many good people are resolutely bent upon setting afoot with reference to the dilapidated houses of the poor may pass into some form which shall throw discredit upon dilapidated structures generally, and, in fact, give a serious shaking to the public reverence for those historical relics of the building kind altogether, which people who have not to occupy them are so anxious to maintain intact for the accommodation of those who have. At such a juncture, therefore, we may direct attention with more than ordinary pleasure to the interesting "report," which we published last week, delivered by the Society for the Protection of Ancient Buildings upon the proposed restoration of the church of St. John and St. Alkmund at Shrewsbury. For certainly there are leading points of doctrine in that document which, whatever may happen, we should be sorry to see set aside, and which, indeed, are laid down with such an amount of judicial discretion that we think there must be almost no one, be he ever so prosaic, who would wish to deny their force.

It is a most commendable instance of that kind of return to first principles, which is so often of essential importance as a refresher in a good cause, when the authors of the report rely, as they do, upon the simple observation that "thoughtful people feel that age of itself gives a dignity to any building."

This is, in fact, the great, however humble, fundamental principle upon which, in the eyes of "thoughtful people" generally—as distinguished from the thoughtless people who in many cases support the dictates of ultra-sentimental archæology—the entire scheme of the Society for the Protection of Ancient Buildings must exclusively rely; and this it is, and this alone, which is recognised by the English public at large as the reason why (to pursue the language of the report) "the question of how your parish church can be repaired for longer use *without modernising its appearance*," ought always to be regarded as a practical question for sensible men seriously to consider. Even men who are so impatient of the poor little superstitions which are the playthings of our day and generation that they would whip them all away like evil spirits, and leave us nothing but the driest of dry "truth" to keep ourselves awake by, may well consent nevertheless to admit that our veneration of the withered and grey may be extended without any harm from the old man to the older building, and that the respect we pay to fourscore years in the flesh may safely be carried indeed much further when we stand before what remains of the handiwork of our forefathers of many centuries ago. That the actual authenticity of such relics of the past—say a more or less obsolete and objectionable past if you must be so particular—should be surrendered to a mere desire to be dandy, is not good philosophy but bad; and it is not the philosophers of our time, but—indeed we know not who—that would so far ignore the pleasures of memory.

"The date of all architectural work," says the report in another paragraph, with a mixture of sorrow and sarcasm which will be delightful to many—"the date of all architectural work (*previous to the Gothic revival*), if not restored, can be fairly accurately determined." In other words, when we would preserve the genuineness of any ancient English building, as an act of kindly grace due to its antiquity, we are, alas! met on the threshold by two formidable and archæologically scandalous considerations. The great function of "the Gothic revival" is now at length seen to have been, in the first place, the confounding of all legitimate characteristics of date—surely one of the most irrational of all architectural motives—and, secondly, the "destruction of the history" of our most cherished remains by the process of dandifying them. Little did they think, our PUGINS, SCOTTS, BUTTERFIELDS, and BERESFORD HOPES, bursting with divine afflatus only a few years ago, straining every nerve to do religion a service, and to impose the saintly smile of the olden time upon the bad new world they unhappily belonged to, that they were only labouring to furnish one more illustration of the futility of all human effort when directed to the correction of natural development—upon whose inevitable stream PUGINS and BERESFORD HOPES of all shapes and sizes are mere floating straws! What have they really done? Built hundreds of churches in a style (so at least says our Society) which, being a confessed make-believe, is only to be acknowledged, now that our eyes are open, as an artistic, and perhaps even a religious, *fiasco*; and "restored" hundreds more by means of a process of "destruction of their history" which on the face of it is sheer Vandalism. If we are misinterpreting the Society's words here, we hope it may be put down to an unintentional misconception of its declarations, which we further beg the spokesmen of its policy plainly to correct. But if we are not misinterpreting the Society's words, what then?

What will probably come out of it all is that we shall pass presently into a new phase of mere fashion and forget the old, as we have been doing, of course, ever since the foundation of the world's history. The career of any artistic enthusiasm is always very much the same. A certain preceding enthusiasm has come to pall upon the appetite, and a reaction of some incidental sort—perhaps a struggle of nature, perhaps a mere freak, just as chance will have it—gradually sets in. For a time there is hesitation, doubt, perplexity. At last chaos settles down into something like form, and a new doctrine, a new school, may be discerned, fighting with the obsolete and the chaotic, under a seemingly smooth surface, perhaps, or one but slightly ruffled by the anxiety of sober minds unwilling to be disturbed but unable to keep still. A new enthusiasm is acquiring force, and, by the time its older votaries are dead, and its younger ones grey-headed, it has become recognised as a discovery and a victory. The language of its advocacy, which yesterday was the vague declamation of despised and furious adolescents, to-day is the oracular eloquence of serene professors and famous academicians—the same language, but



vibrating in another atmosphere, and addressed to another world. All men now fall at the feet of the prophets. The one final revelation has been received at last, and grateful humanity has no more to do but to enjoy it for ever. Alas for the mutability of all mundane things, cycle after cycle ceaselessly revolving! No sooner have we arrived at this beatific peace than the struggle beneath the surface begins. We get tired of perfection and long for change. The process has to be recommenced. The old enthusiasm is moribund; hurrah for the new!

Such is the world we live in. But we confess to a feeling of sadness at any rate, and somewhat unphilosophical shame, when we are so bluntly reminded by this very respectable Society for the Protection of Ancient Buildings that the "Gothic revival," like all other enthusiasms, has had its day of prosperity and praise, and must now have its long night of—we do not like to say obloquy, but what shall be the word? Never mind; amongst the eccentricities, if so they must be called, of human genius, those of modern English Mediævalism can scarcely fail to secure from the artistic historian for many ages to come no small meed of sincere admiration.

### ITALIAN PAINTERS AND ITALIAN POTENTATES.

WHAT is to be said of the relation of the artistic faculty in its highest development to the society in the service of which this faculty has been exercised? The consideration of the question is urged upon us by conclusions respecting it which are enunciated without hesitation in a recent graceful and thoughtful little book by Lady EASTLAKE—a republication of review articles on LEONARDO DA VINCI, MICHAEL ANGELO, RAPHAEL, TITIAN, and ALBERT DÜRER. These conclusions are so introduced and supported that vigilance is required to keep the judgment suspended for attention to a counter argument, otherwise there is risk of being hurried into premature assent to views which are not agreeable to rest in, although there is much excuse for them on a superficial survey of the circumstances.

True it is that almost all that was best in art during the years covered by the life of MICHAEL ANGELO—and that is as much as to say all that was greatest and best in art in modern Europe—came into bloom along with all that was worst in the social condition of Europe. Are we really put thus in presence of a true relation of cause and effect? Was the flourishing of art the natural result of this stimulative atmosphere of all that was hateful? So it appears we must be content to believe, unless it shall appear that the accomplished critic has only said in her haste that "the condition which gives birth to art is precisely that under which true civilisation has never yet flourished . . . that the conditions which experience shows us to have been conducive to art are exactly those most prohibitive of civilisation."

If this be really the lesson of experience, to what a dilemma are we not reduced? The appearance of a great work of art must be greeted by a true lover of his species with all the alarm awakened in an Eastern city by the first symptoms of the plague. The philanthropist is bound to rouse and join hands with the statesman in tracking the mischief and in stamping it out. Civilisation, which, if it mean anything, is the secured establishment of a state of society, not torpid, but progressive in happiness and morals, must be saved at all costs, and under such a compelling necessity fine art must go.

If this were the case, we should, indeed, be required to choose between noble art and civilisation; but that it is not the case is proved by the very statement of such a consequence. When we are brought up to the question of such sacrifice of high art and fine art, it appears at once that we are asked to consent to rescue the ideal of human life by a mutilation, which would be to destroy it; for what worthy ideal of civilisation can be created to which progressive enjoyment, and even production, of elevated art is not essential?

And let those speak of the characteristics of "the great and wealthy of the earth" at any particular time, who know them best, but not extend their experience to a universal rule. That rich, reckless, profligate tyranny, as mere vulgar sensual, and ignorant wealth, may encourage a swarm of professors—of practitioners—of art, who are little if at all

superior to sycophants and parasites, and fill the world with productions that are adapted to the degraded or trivial or uncultivated predilections of their patrons, is no doubt possible—has no doubt from time to time been the fact. But this does not touch the case of the great period of Italian art. It may apply to some of the characteristics of French art of the monarchy. There is no inconsistency between the courtliness of Versailles and Marly, and the special perfection of the upholstery and porcelain that is so vehemently competed for at CHRISTIE'S. We can imagine the charming Madame DE SÉVIGNÉ inditing her immortal letters on one of these exquisite *escritoires*, without being surprised at her adding a callous postscript of satisfaction at the hanging of some dozen poor peasants for acts of not very gross insolence. But the case is otherwise at Rome and Florence in the age of MICHAEL ANGELO. Here the difficulty—a difficulty which our fair authoress fails even to perceive much less to grapple with—is to account for the astounding contrast between the spirit of the art and that of the class or the men with whom rested the patronage of art. Consider the matter thus: let us suppose that the works of art were the sole historical memorials of this period; what sagacity could, by the study of them, recover the characteristics of LEO X., JULIUS II., the BORGIAS, SFORZAS, LORENZO DI MEDICI? Who will pretend that these works, if submitted to the strictest analysis, would be resolvable into the elements of treachery, profligacy, sensuality, coarseness, superstition, and a whole train of other vices, with of refinement—a trace? So little were these artists in any sense whatever "sure thermometers of the atmosphere in which they breathed," that inasmuch as they breathed in such an atmosphere and were not stifled—that causes which mortally affected too many did not injure their inspiration or their moral and truly patriotic aims—herein lies the proof that they were not of that atmosphere, though perforce they were in it, proof of the constitutional vigour of their artistic endowment which could preserve health in the midst of miasma.

It is true that "MICHAEL ANGELO's Sistine ceiling was commenced in the same year with that first transaction of European diplomacy—the League of Cambray; an alliance," it may be, though that is hard to say, "unmatched in history for rapacity, cruelty, and perfidy, and the signal for a ten years' reign of devastation and carnage." But neither the League of Cambray, nor its causes or consequences, can be seriously reckoned among the conditions which were conducive to the perfection of the art of MICHAEL ANGELO or RAPHAEL, or that gave birth to the art at the expense of civilisation. We must look for the favouring conditions isolated elsewhere, or entangled amongst conditions which were the reverse of favourable, and having a hard fight to maintain against them. MICHAEL ANGELO gained his own way as to the scope of the design of the Sistine ceiling with great difficulty against the scheme of the author of the League of Cambray, and he treated it throughout with the loftiest independence. It is much if we casually notice that the DELLA ROVERE (*robore*) oak leaves and acorns of JULIUS II. are prevalent in quite subordinate decorative borders and festoons. It would be as rational to ascribe the elevated tone, the dignity of devotional feeling, and aspiration after all that is pure and refined, which pervade the painter's sonnets and other poetry—art as sacred as that of the chapel ceiling—to conditions involving "such universal depravity and immorality, such cowardice and perfidy, such effeminacy and sensuality, such sloth and such vices—in short, such vilenesses and corruptions as hardly appear credible in a time of so-called Christian institutions."

The crimes, sensualities, and superstitions were so far from fostering the arts, that they were, in fact, the influences which constantly interfered with the exercise of them when in full vigour, as evidenced in many an indignant wail of MICHAEL ANGELO, and are so far chargeable with the final catastrophe of their extinction in Italy.

RAPHAEL was taken away early from the evil to come; but who shall wonder if MICHAEL ANGELO, after his experience of the years which succeeded, was moved when the time came at last that he could paint his *Last Judgment*, to make the predominant sentiment that of wrath against wickedness. Those who have given due time to the contemplation of this immense and awful picture, may well have felt that the indignation at "the conditions" of his time, which "*il terribile*," so pathetically expressed in his response to the verses on his "Night" at Florence, had since only gathered force, and at last in this picture found irrepressible expression.



No! we must not look to all that was worst in a corrupt social system for the causes and conditions of all that the world has seen that is most excellent in art. The healthy root which developed this bright consummate flower lay lower down in the social strata; and when the plant of promise did emerge it was favoured by influences far different indeed from the blighting airs of sensuality and superstition. One of these may be recognised in the enthusiasm roused by SAVONAROLA. That this affected MICHAEL ANGELO is on record; that RAPHAEL also was not untouched by it, however indirectly, we have under his hand by his introduction of the martyred Dominican side by side with DANTE in his *Theology*. And here allowance must be made not only for SAVONAROLA's preaching, but for the pre-existing healthy dispositions which caused it to touch so many human hearts. Another influence was that of PLATO, not through the spurious revival of FICINUS, but through the translation which he made into Latin of the entire works of the philosopher. The true and admirable influence of the Platonic ideal Beauty is too large a subject to be entered on here. It is a subject on which the author of the sketches of painters may be, as the examiners say, "referred to her studies."

### PARIS NOTES.

M. BORNICHE, an ardent connoisseur in oil paintings of the modern school, has recently died in Paris. The deceased, who had made a large fortune during his lifetime as a timber merchant, has left a collection of no less than 17,000 pictures of more or less value and merit. He was a large owner of property, and lived on the first floor of a house in the Rue de Rivoli, near the Halles. From time to time he would purchase some work that took his fancy, until finally the taste became a veritable mania, and he took to buying whole batches and collections at a time. His apartments at length were found much too small to contain the immense quantity of paintings he had thus gathered together, and the collector then conceived the idea of erecting a vast building on some waste ground belonging to him near the Boulevard St.-Germain, for the purpose of exhibiting his accumulation of canvas; but death put an end to his project. Dying intestate, this veritable pile of fine art has become the property of his daughter, who has resolved upon the sale of the entire collection. The number of lots to be brought to the hammer will necessitate the extension of the auction over a lengthened period. Eight thousand paintings are to be offered for sale during the ensuing winter, and the remainder disposed of at the rate of 250 lots four times a week, or 1,000 every eight days. The auctioneers, who will certainly have substantial reasons to bless the memory of the defunct collector, will consequently require upwards of two months to complete the sale of this extraordinary hoard.

The Municipal Council has approved of the scheme for the artistic decoration of the Mairies of the Fourth, Fourteenth, and Twentieth Arrondissements of Paris, at a total cost of 164,000 frs. The designs will be selected by public competition, and must be sent in, made to 1-10th scale, before April 1 next. The prizes allotted to the successful competitors will be in the case of the Fourth Arrondissement—first prize, 2,500 frs.; second prize, 1,500 frs. In the Fourteenth Arrondissement—first prize, 2,500 frs.; second prize, 1,500 frs. And in the Twentieth Arrondissement—first prize, 3,000 frs.; second prize, 2,000 frs.

The Triennial Salon finally closed on Thursday, the 15th inst. Contrary to what was announced by some of the Paris papers, there was no ceremony for the distribution of prizes, from the very simple reason that, by the regulations of the exhibition, no prizes or notices of any sort have been awarded. The attendance was very large on the last two free days—Thursday and Sunday; but the remark is generally made that throughout the duration of the exhibition the respectable labouring element, which as a rule eagerly avails itself of every opportunity of visiting similar exhibitions, has been conspicuous by its absence. Altogether this first experiment of a Retrospective Exhibition under Government auspices can hardly be termed a popular success.

One of the very oldest buildings in Paris, the Tour de Clovis, was lately declared to be in such a perilous state as to necessitate its removal. This tower, which is enclosed in the buildings of the Henri IV. Lycée, and has long been classed as an historic monument, is supposed to have been erected about the year 486, by the

king whose name it bears. Being adverse to the demolition of so interesting a relic of the past, the authorities called in several architects to consult upon the possibility of its repair, with the result that a plan of M. Ruprich Robert has been adopted to this end, and is to be carried out at a cost of 25,000 frs. Half of this expense will be borne by the City of Paris, and the remainder by the Department of Public Instruction.

At the last meeting of the Académie des Inscriptions et Belles-Lettres an important letter was read from M. Olivier d'Espina, of Sfax, in Tunis, announcing the discovery of a Roman funereal monument raised to the memory of Consortiola, and, near the same spot, the ruins of a Roman bath, containing an immense mosaic of very beautiful design. These discoveries have been made on a waste tract situate about four miles to the south-west of Sfax.

A decree of the Minister of Public Instruction and Fine Arts, published in the *Journal Officiel*, names the following professors at the Ecole Nationale des Beaux-Arts: (1) For simultaneous instruction in the three branches of art—M. Yvon, painter; M. Thomas, sculptor, and member of the institute; and M. Coquart, architect. (2) For the evening drawing and modelling classes: M. Bonnat, painter, and member of the institute; M. Delaunay, painter, and member of the institute; M. Boulanger, painter, and member of the institute; M. Lenepveu, painter, and member of the institute; M. Guillaume, sculptor, and member of the institute; M. Chapu, sculptor, and member of the institute; MM. Mercié and Barrias, sculptors.

Another decree authorises the Ecole des Beaux-Arts to accept the important bequest made by Madame Daupeley, to found five annual prizes of 1,000 frs. each, to be awarded to the most deserving among the architectural students.

In the first stage of the competition for the Prix Chaudesaigues, open to all French architects below thirty years of age, forty-six took part. The subject selected by M. Questel was a sketch of a *Triumphal Arch for a great Public Rejoicing*, and the following ten competitors were admitted to enter *loges* for the final stage, which consists in completing and elaborating their original designs: Armand Hourlier, pupil of M. Douillard; Merland, pupil of MM. Vaudremer & Kaulin; M. Dourgnon, pupil of M. Pascal; Eustache, pupil of M. Ginain; Robert de Massy, pupil of MM. Coquart & Gerhardt; Portal, pupil of M. André; Maistresse, pupil of M. Guadet; Debrie, pupil of M. Guadet; Chedanne, pupil of M. Guadet; and Hié, pupil of M. Ginain. They remain *en loges* the whole of the present week—from Monday morning to Saturday evening—and the award will be made on Tuesday next, the 20th inst. This competition is one of the great events of the year for architectural students, the prize being a scholarship of 2,000 frs. per year for two years. The winner is bound by the terms of the foundation to go to Italy to complete his studies, and remain there as long as he holds the scholarship.

### MR. RUSKIN ON "PUNCH."

IN the lecture which was delivered last week at Oxford, Mr. Ruskin began by reference to what is called cheap art. The phrase contained, he said, a dangerous fallacy, for there is no such thing as real cheapness. Everything has its just and necessary price, which we can no more alter than we can alter the course of the earth, and whenever we boast that we have bought anything for half-price we may be assured that someone else has had to pay the other half. Still there are obviously some forms of art which, as involving less labour and less rare genius, are more generally attainable than others, and it is this kind of art which necessarily has most influence over simple minds. Of all instruments of cheap art in this sense the woodcut is the most important, and there is no limit to the mischief it can do by encouraging vulgar and vile modes of design. Indeed, no entirely beautiful representation is possible in a woodcut, whereas everything vulgar and ugly is. Mr. Ruskin said he had framed a selection of woodcuts, ignorantly drawn and vilely engraved, from a book on "The Races of Southern America," representing whatever is savage and sordid, ridiculous and vicious, in human nature, and next to them he had placed some scientific studies by Tintoret, in which are to be seen all that is graceful in form, true in instinct, and cultivated in capacity. Mr. Ruskin exhibited also some woodcuts from a recent book "La Pourquoi de Mlle. Susanne," which purports to "amusingly instruct" a young girl in the elements of science. There was a woman struck by lightning for her instruction, a liver exposed for her satisfaction, and a nightmare described to her entertainment, and whatever monstrosities known to science were there collected in one black company by cheap engraving. Of



another result of this cheap art a critic wrote the other day that "by a series of bands of black and red paint the demoniac beauty of the sunset was entirely successfully reproduced"—a remark, said Mr. Ruskin, which contains everything that is wrong, call it demoniac, diabolic, or æsthetic, as you will.

From these general remarks Mr. Ruskin turned to the English artists who had put the woodcut to a better use. The title of the lecture was "The Fireside: John Leech and John Tenniel;" but although he had given these names to those of the real founder, and of by far the greatest illustrators of *Punch*, he took rather the work of Mr. Du Maurier as typical of entirely classic wood-engraving. For samples to be placed in the standard series, Mr. Ruskin had selected Mr. Du Maurier's favourite heroines, Mrs. Ponsonby de Tomkyns and Lady Midas; and he pointed out how the beauty of the younger lady depended on eight or ten strokes across the cheek. It is an optical law that transparency depends on dark over light; a snowstorm seen over a dark sky is not transparent, rain seen between us and a rainbow is. Mr. Du Maurier sometimes carries this law to an excess, and his drawings are often more like a chessboard than a picture. But nothing can be more perfectly true and right than the workmanship in many of his smaller studies, and Mr. Du Maurier's faithful representation of beautiful faces is one of the chief glories of "the immortal periodical." The kindly and vivid genius of Leech saw a jest in everything, and his loving wit covered the whole range of social life. Mr. Tenniel has given a graver scope and a steadier tone to the license of political controversy. Mr. Du Maurier's work has been to illustrate the law on which Mr. Ruskin insisted in a former lecture, and to which he alluded again in *Fors* the other day, that "on all the beautiful features of men and women, throughout the ages, are written with solemnities and majesty of the law they knew, with the charity and meekness of their obedience, and on all unbeautiful features are written either ignorance of the law or the malice and insolence of their disobedience." And from this point of view Mr. Ruskin exhibited enlarged copies of "Alderman Sir Richard" (with his "very expensive cast of features") and "the Colonel," in which Mr. Du Maurier has shown with accurate delineation, never degenerating into caricature, the permanent deterioration of feature, on the one hand, which results from self-indulgence, and the noble type which comes, on the other, from habitual self-control and just self-respect.

It is only *Punch's* business to be for a moment serious, but there are lessons worth learning for all that. *Punch* has always been a polite Whig, with a sentimental respect for the Crown and a real respect for property, steadily flattering Lord Palmerston and Mr. Gladstone, and having for his ideal of human perfection the British hunting squire, the British colonel, and the British sailor. The hunting squire: and the most beautiful sketch by Leech, or, indeed, in the whole of *Punch*, is Miss Alice on her father's horse. But is it not a remarkable thing that Leech should never have stopped to ask whether all girls can be like Miss Alice, and that *Punch* should never have seen any beauty in the poor? Nor is that all. Mr. Du Maurier's children, with whom the ladies reclining in elegant attitudes are generally too idle to play, are extremely pretty; but have you not noticed how much their prettiness depends on the dressing of their back hair and on their boots? The girls are beautiful, too, but there is a look of somewhat defiant pride in them all; and there is not a single girl in *Punch* with humility or enthusiasm written on her face. The popular voice is strong in *Punch*, and is it not remarkable, too, that the incarnate John Bull should always be a farmer, and never a manufacturer? and that *Punch's* ideas of civic majesty should be this repulsive picture of *Sir Pompey*? Look, too, at this characteristic type of British heroism—*John Bull guards his Pudding*. Is this the final outcome of King Arthur and St. George, of Britannia and the British lion? And is it your pride or hope or pleasure that in this sacred island that has given her lion hearts to Eastern tombs and her pilgrim fathers to Western lands, that has wrapped the sea round her as a mantle and breathed against her strong bosom the air of every wind, the children born to her in these latter days should have no loftier legend to write upon their shield than *John Bull guards his Pudding*? It is our fault, Mr. Ruskin continued, and not the artist's; and I have often wondered what Mr. Tenniel might have done for us if London had been as Venice or Florence or Siena. In my first course of lectures I called your attention to the picture of the Doge Mocenigo kneeling in prayer; and it is our fault more than Mr. Tenniel's if he is forced to represent the heads of the Government dining at Greenwich rather than worshipping at St. Paul's. But I have been too long, said Mr. Ruskin, in carping, and let me bear tribute, in conclusion, to the charm which these artists have given to the hearth and the fireside. With whatever restrictions you should receive their flattery, this at least you may thankfully recognise, that it contains evidence enough of the beauty and crescent strength of the young generation. At no period—and I speak after careful and minute comparison—has there ever been anything so refined, so innocent, so dainty pure as the girl beauty of the British islands. And I know from my own experience of help received from young members of this University that there was never a time when the country could more securely trust her destiny to the genius of her sons and her honour to their hearts.

## THE NEW BALL-ROOM AT SANDRINGHAM.

THE new ball-room which His Royal Highness the Prince of Wales has had erected during the past summer was used for the first time at the county ball given by the Prince and Princess on the 9th inst. Formerly the entrance hall of Sandringham House was used for the purposes of a ball-room, but the Prince has had a new wing constructed at the south side of the mansion, at right angles, between the house and the offices. This has been carried out from the designs and under the superintendence of Mr. Robert W. Edis, F.S.A. In this wing a spacious and elegant ball-room has been constructed with a corridor connecting it with the remaining portion of the house, and behind it have been provided new telegraph and post-offices. The principal portion of the wing is occupied by the ball-room, the general effect of which suggests great purity of design and perfection of execution. Externally the wing is in harmony with the rest of the house, being faced with red brick, with Ketton stone dressing. Entering by the old private entrance, which has been incorporated in the new work, the visitor reaches the ball-room by passing through a small ante-hall, 21 feet by 14 feet, into a corridor which leads away by the right hand to the dining and other rooms of the house and the principal entrance, opposite being the tea-room, 21 feet 6 inches by 17 feet, while on the left is the principal entrance to the ball-room. The corridor, which is about 60 feet in length, has been constructed in part out of a portion of the house, and is in strict harmony with the interior of the ball-room. The general style of the constructive decoration is Elizabethan freely treated. The ceiling of the corridor is elaborately panelled, and on each side of the walls is wood panelling 5 feet high, and it is lighted from gas brackets formed of cherry metal and hammered iron. The stove in the ante-hall is of a very tasteful design, with cherry metal *fleur-de-lis*, the hearth being in mosaic. The floor is of oak, and under each window in the corridor, as well as in the ball-room, is a seat beneath which ventilation is obtained by means of cold air passing over hot air pipes, and so through copper panelled gratings, combining heat with ventilation. Passing out of the corridor into the ball-room the visitor might almost imagine himself in the interior of a Russian ball-room as regards delicacy of colour, and there is a delightful sense of light, airy coolness. The room is 66 feet long by 30 feet 6 inches wide, the walls being 18 feet high from the floor. The ceiling, which is technically described as wagon-headed in shape and elaborately panelled, is 23 feet high in the centre. On either side of the room are deep recessed alcoves, 25 feet long by 4 feet deep. The south alcove is filled with windows, and the north with a magnificent fireplace. There are large bay windows at each end, and at the east end is the minstrel's gallery, the front of which is an open white arcaded balustrade, and it is covered with moulded ribs filled in between in low relief, in the form of a very perfect specimen of stamped leather paper. The ceiling is elaborately panelled after the manner of sixteenth-century houses in England, of which Crewe Hall is so fine a specimen. An elaborate cornice and frieze nearly 2 feet deep goes quite round. The plain surface of the walls is painted a delicate fawn colour, the lower portion being panelled as a high dado, with mask and scroll ornamental frieze, in all 7 feet high. The two central alcoves are supported by columns and pilasters of a composite character, the upper portion being fluted and the lower elaborately carved with mask and scroll ornaments. The south alcove is filled up with the fire-grate and mantelpiece, which is a very imposing work. The grate, which is a very fine design, is constructed of brass and iron; the sides of the fireplace are lined with tiles painted with figures and foliage in delicate tones of brown and yellow; and the whole is enframed with bold mouldings of Siena marble, which is carried round the basis of the carved trusses which support the columns of the superstructure, the whole being elaborately carved and furnished with a pedimental head. A projecting centre panel has been arranged to receive a picture. The whole height of the mantelpiece is about 16 feet, within a couple of feet of the cornice. The hearth is laid with mosaics with Siena marble fender. All the windows in the ball-room are internally arched, with recesses in which the blinds and curtains are hung to render unnecessary ordinary curtain poles. The floor is of oak with simple-parquet bordering. The whole of the ceiling and decorations are white, and the latter have all been designed and moulded specially for the room. For dancing purposes it is lighted by three large-centre gaslights in the roof specially designed by Mr. Edis, which serve for the purpose of ventilation as well, the foul air being pumped into a central external turret. There are also seven two-light gas brackets projecting from the walls, fitted with opalesque globes, which throw out a soft light. The walls are at present being decorated with the Prince's Indian collection of arms, arranged in various trophies, and the windows are curtained with heavy gold-embroidered Indian silk.

As before stated, the whole of the work has been carried out from the designs and under the personal superintendence of Mr. R. W. Edis, F.S.A., but great assistance has been derived from the taste of Colonel A. Ellis, Mr. C. S. Beck rendering efficient aid as clerk of the works. Mr. Purdon Clarke, C.I.E., of the South Kensington Museum, has arranged the trophies of arms. A considerable portion of the work has been carried out by the estate



workmen, and, as far as possible, the tradesmen of the county have been engaged. The ironwork has been supplied by Messrs. Barnard, Bishop & Barnard, of Norwich; Messrs. Hawes & Frazer, of Norwich, being also employed. Mr. Thompson, of Lynn, has supplied the wood, Messrs. Hewetson and Woodhouse, of the same town, the slating and plastering respectively. The carving and plaster decorations have all been supplied by Messrs. Jackson & Son, of Rathbone Place, London; the stamped leather paper by Messrs. Jeffery & Co., Islington; the gas brackets by Messrs. Hart, Peard & Co., of London; the gas and ventilating shaft by Messrs. Strobe, of London; and the parquetry by Mr. Steinitz, of the London Parquetry Works, Camberwell.

### THE ADMIRALTY AND WAR OFFICE COMPETITION.

A LETTER has appeared from Mr. W. White, F.S.A., on the forthcoming competition, in which he says that the excessive privacy proposed in the adjudication is indicative of suspicion and moral weakness, and has been supposed to show a fear of adverse criticism in the final result. There is to be no exhibition of the unsuccessful designs. They are to be returned to the competitors under the most strict secrecy; and all who take part in the competition, at enormous toil and considerable expense, are to be deprived even of the one poor solitary recompense of the bare fame of having shown what they can do. It will be also a disappointment to the public. In the first competition, immediately after the selection of the first ten or less than ten to be submitted to a second competition, all the unsuccessful designs ought to be publicly exhibited. In like manner after the second competition all the remaining designs should be exhibited except the one finally selected. By these means, though the judges accept the public responsibility, the final decision would not be liable to be called in question, while all would in a manner be contributing to the general final result through the publication of their solution of some of the difficult problems to be solved, whether in the arrangement or in the architectural treatment, and no competitor in such a case would grudge the possible aid contributed by him, through his design, towards the production eventually of the most satisfactory result. Thus we might hope the fabric, when carried out, would represent to this extent the combined force of the profession instead of the imperfection of the individual in debatable points.

### THE ATRIUM VESTÆ, ROME.

THE exact value of the highly interesting discovery connected with the Vestal Virgins made on the Forum, where it touches the flank of the Palatine close beside the church of Santa Maria Liberatrice, has yet to be ascertained, but in the meantime it has, says a correspondent of the *Times*, at once aroused general local interest to a degree that was strangely wanting in connection with the discoveries of the Rostra, the Curia, the Regia, the exact line of the primitive Sacra Via, and the other important results obtained through the excavations Signor Bacelli has carried on, and continues to carry on, with untiring energy. It must be admitted that those results were only obtained by a slow and gradual process, and were only fully recognised, especially as regards the Rostra, after patient study and mature consideration. There was nothing sudden about them; nothing to kindle instant excitement in the public mind, and afford ready material for general conversation and discussion. With the late discovery, however, the case was diametrically opposite. It fulfilled, moreover, those requirements, in the form either of sculpture or important inscriptions, without which the Romans have become accustomed to consider an excavation fruitless. It was made at once. Some of the workmen had been busy for a couple of days clearing the accumulation from around several equidistant slight brick piers. The construction marked a somewhat late period, and they attracted no special notice, but the difference of an hour revealed the fact that they stood upon rectangular marble pedestals with inscriptions on them of which the first lines were just visible above the earth. Extra hands were at once set to work; a few hours more and the débris around three pedestals, each about 5 feet in height, was removed. The evening papers announced the discovery of the celebrated Atrium Vestæ with inscriptions in honour of three of the Sisters Superior (Vestalis Maxima), and this corner of the Forum has since been a general centre of attraction to learned and simple.

That in these pedestals supporting brick piers we have positively one side of the Atrium Vestæ cannot, however, be positively affirmed as yet. They certainly stand in regular order on the exact spot where all authorities, ancient and modern, agree in situating that Atrium; they are in close contiguity to the remains of the temple; they have been discovered where other important inscriptions relating to the Vestals were found in the sixteenth century, but there is the strange circumstance that they had

apparently been moved from the position in which they were originally placed.

Apart, however, from this particular, which demands closer examination and study, and the light more complete excavation will throw upon this subject of the highest topographical interest, the inscriptions alone constitute a discovery of the first importance. The first, which is fifteen lines in length, was inscribed in honour of Flavia Publicia, Virgo Vestalis Maxima, by her niece "Aemilia Rogatilla, Carissima Foemina," and of her grand-nephew, "Minucio Honorato Marcello Aemiliano Carissimo Puero," in testimony of her sanctitude and piety and of the holy and religious care with which through all the sacerdotal grades she laudably administered in sacred things to the approval of the Most Holy Mother Vesta. The second was placed by the "Pontifices Virginibus Vestalibus Curandis," in testimony of the chastity and modesty of another "Virginis Vestalis Maxima," but who she was the inscription no longer tells. She had through some unknown reason incurred public dislike, and her name has been erased from the inscription, which fills eight lines. The date, which is uninjured, on the side of the pedestal, was placed between the years 363-364 A.D. The third is inscribed to Coelia Claudiana, another sister superior, who had filled her high office for no less than twenty years, by her client, Aurelius Fructosus.

### BIRMINGHAM ARCHITECTURAL ASSOCIATION.

THE annual meeting and conversation of the Birmingham Architectural Association was held at the Queen's College, Paradise Street, on the 7th inst. Mr. J. J. Bateman, the president, occupied the chair. There was a large attendance. The ninth annual report, which was read by the secretary, Mr. Franklin Cross, recorded a considerable increase of both ordinary and honorary members during the session, which had been one of the most successful which the association had enjoyed since its inauguration. The committee, however, was led to urge upon the members the necessity for continued and increased individual effort, so that the true object of the association might be attained and the profession generally benefited. The ordinary meetings held during the year had been more largely attended than those of the previous sessions. The classes too had been more numerous attended, but the committee desired to impress upon the younger members of the association the benefit to be derived from contributing papers and preparing designs. The designs which had been contributed were fairly satisfactory. Archæological and sketching excursions had been made during the session to Knowle and Packwood. The balance-sheet showed that the financial position of the association was in a much better condition than a twelvemonth ago. Instead of having a balance against the association of 15*l.* 2*s.* 8*d.*, as was the case last year, there was now only an adverse balance of 4*l.* 16*s.* 3*d.* The liabilities were 7*l.* 15*s.*, as compared with 25*l.* 2*s.* 8*d.* in 1882. The report and balance-sheet were adopted. In his address the president said he proposed to throw out a few hints upon professional practice to young architects about to enter upon a professional career. He dealt at length with what should be the mode of procuring business, and with the legal position and responsibilities of the architect. One source of evil, he said, was the too anxious desire to commence practice before a sufficient sound knowledge had been obtained to render the young architect fit to undertake the competent discharge of professional responsibilities. The student should cultivate that branch for which he felt himself more especially fitted, and to this end should, after his pupilage, enter into one or more offices in which this special line of practice was most fully carried out. If the mode of obtaining business were conducted on the lines laid down by the institute it would at least afford the student an opportunity of proving his metal. The law required that an architect should be qualified for his work, and he was liable for damages for negligence and unskilfulness. The architect's duty was to protect the building, the owner, and also to see ample justice done to the builder. In conclusion, he said he should like to add a word of warning, and bid all beware of restless ambition, which, like a circle in the water, never ceased to enlarge itself, till, by broad spreading, it dispersed to nought. Amid all the changes of a chequered professional career he would suggest the motto for their professional shield, "Purity and strength."

There was a large number of drawings on view, which had been lent by London and Birmingham architects. Ecclesiastical metal work was contributed by Messrs. Jones & Willis, and specimens of stained glass by Messrs. Winfield & Co. The latter part of the evening was occupied by a promenade concert.

A Brass has recently been erected in King's College Chapel, London, to the memory of the late Professor Rymer Jones. Upon it are represented animals, birds, &c., in illustration of the sciences of comparative anatomy and physiology, to which the professor was devoted. The work was designed and executed by Mr. T. J. Gawthorpe.



## TURNER AND THE "LIBER STUDIORUM."

A LECTURE on "Turner and his 'Liber Studiorum'" was given on the 8th inst. by Mr. Frederick Wedmore, in the mayor's parlour at the Manchester Town Hall. Mr. Wedmore, after stating that through the kindness of Mr. T. C. Horsfall he was able to show to the audience some prints in the "Liber Studiorum," remarked that a pictorial artist expressed his conception by colour or line. Some great artists were masters of the one and some of the other, and a fortunate few, Turner amongst them, were masters of both. Turner was, of course, a great colourist. Whenever Turner's colour failed it failed because it was some unheard-of experiment made by a genius familiar with success. He doubted, however, whether Turner's command of colour was greater than his command of line. His colour would gradually disappear, but his works in black and white would remain; and fortunate indeed was it that Turner executed and caused to be executed by others so much engraver's work. Turner etched little, but that little was done with immediate mastery. It was a happy chance to have lived at a time when the English school of engraving was at its height, for shortly after he died engraving became a lost art. The "Liber Studiorum" was the first issue of serial prints which Turner published. It was distinguished from his other publications by its general plan, and also by the medium employed. The aim of Turner in the "Liber Studiorum" was that each print should have the effect of a finely-washed drawing in bistre and sepia, strengthened by pen work, which pen work indicated now the leading lines of the landscape and now the heavier masses of shadow. To accomplish that he decided to employ both etching and mezzotint, and to employ them together; and the combination enabled Turner by his own hand to accomplish much of the work. Turner never was a line engraver. He made himself a great etcher, but the etching he performed was never intended to be a finished work of art. Turner meant the "Liber Studiorum" to express the full range of his accomplishments. He was fettered by no inevitable connection with this or that locality, as he was in other works of his, and in it he challenged comparison with all the landscape artists who had gone before him and all his contemporaries. Claude was a great influence on Turner, but when he seemed to be delivering a message that was Claude's he delivered it with an accent of his own. The finest of Turner's critics, Mr. Ruskin, had said that message was a melancholy one. Its dominant note was the note of pathos which was somehow inseparable from the highest beauty. Turner's finer landscapes were distinguished by much adjustment; they were never mere reproductions or transcripts. As a literary artist dealt with society and made the comedy or novel more brilliant if he could than the real scenes he professed to depict, and as the satirist's pencil made Mrs. Ponsonby de Tomkyns fuller of tact than we knew such lady to be in real life, so the landscape painter improved a little upon nature, or rather seemed to improve in representing that which lay within the scope of his art, feeling very sure that much beauty must lie for ever outside of it. Turner's secrets of composition were of the most intricate kind. There was no end to the devices by which he gave scale, led the eye to that point at which the picture's beauty was focussed, and removed it from the accidental yet necessary detail which had its own humbler service to fulfil. To know the work in the "Liber Studiorum" minutely was practically to know Turner; and to know Turner minutely, even if one knew no other master, was to enter into the temple of art by one of the very greatest of its portals.

## THE LATE MR. JOHN LESSELS, ARCHITECT.

ON Monday last Mr. John Lessels died in Edinburgh, after an illness that had lasted off and on for about six months. Mr. Lessels, who was born at Kirkcaldy in January 1809, attended the school of his native place at the time when it was successively taught by Edward Irving and Thomas Carlyle. His early ambition (says the *Scotsman*) was to be an artist, and a marked fondness for drawing was one of his early characteristics. His father, however, on the recommendation of Mr. Ferguson, of Raith, sent him to Edinburgh to be trained as an architect. The first office he entered was that of Mr. Burns, where, by-and-by, he became inspector of works, and in that capacity was employed in various parts of the country. In 1846 he began business on his own account, and in course of time attained to the front rank of his profession, by the members of which he was held in high regard. On the passing of the Edinburgh Improvement Act he and the late Mr. Cousin were appointed architects to the trust, and as such were called upon to take an important part in the carrying out of the scheme that had been devised for ameliorating the sanitary condition of the Old Town. In the work of reconstruction undertaken by the trustees Mr. Lessels had opportunities of leaving his mark on the architecture of the city, among the streets which he specially designed being Jeffrey Street, whose effective elevation now forms so prominent a feature in the eastward view from the North Bridge. By the Im-

provement Trust his opinion on any matter under discussion was always received with the greatest deference, the members of that body having the highest confidence in the soundness of his judgment, which they knew was never influenced by other than the most upright motives. Among other works accomplished by Mr. Lessels should be mentioned the laying-out of the feuing plan for the lands of Drumsheugh and the designing of St. Leonard's House, Edinburgh—considered a fine specimen of Scottish baronial architecture. (See *The Architect*, July 2, 1881.) Messrs. Nelson's works at Parkside; the Smith Institute, Stirling; the Palace Hotel, Princes' Street; the handsome pillars at Hope Park; and Charter Hall and Blackadder House, Berwickshire, may also be specified as testifying to his professional taste and skill. He was one of a number of leading architects selected to furnish competitive designs for St. Mary's Cathedral, and it was said that his drawings were within one vote of being accepted. In leisure hours Mr. Lessels continued through life to cultivate painting, and he from time to time exhibited water-colour drawings of church interiors or street views that had attracted his attention in holiday rambles on the Continent. As a critic of works of art he showed excellent discernment. Mr. Lessels was for some years president of the Edinburgh Photographic Society, an office which he only resigned quite recently on account of failing health. He also took a leading part in promoting the very successful exhibition held some time since under the auspices of the society. As a member of the Architectural Association, Mr. Lessels did yeoman service in connection with the exhibition which that society was instrumental in organising in Edinburgh about a year ago. He was vice-president of the Scottish Society of Arts, and an honourable member of various societies in Belgium with which he became connected in early life in the course of frequent visits to that country. As a practical architect, Mr. Lessels is said to have been among the first, if not the very first, to introduce open iron fronts into Edinburgh shops—a change which, whatever may be said of it from an æsthetic point of view, was no doubt the result of an honest effort to meet modern business requirements. By a large circle of friends Mr. Lessels was held in high esteem for his many excellent business and social qualities, not the least noteworthy of which were sterling uprightness of purpose, an equable balance of mind, and a quiet, unassuming manner which rendered intercourse with him easy and pleasant. To an inner circle he could on occasion disclose a vein of genial humour; and he had ever at command a fund of anecdote, chiefly derived from his own shrewd observation of men and manners.

## MESSRS. MACFARLANE'S PATTERNS.

THE action of interdict which was taken by Messrs. Macfarlane & Co., of Glasgow, against the Oak Foundry Company, has been concluded. The complainers maintained that the respondents had infringed the copyright of their catalogue, which they had got up at an expense of about 12,000*l.* (the patterns for which had cost 25,000*l.*), and they asked for interdict. The application was resisted by the Oak Foundry Company, who argued that the catalogue was a mere compilation, and that it contained the designs of many articles which had not been registered.

The hearing of the evidence occupied several days. Complainers' witnesses proved that the designs said to have been infringed were their own invention, and by means of drawings, tracings, &c., they endeavoured to establish that many of respondents' designs had been copied from Messrs. Macfarlane's book. Amongst the witnesses was a draughtsman who had been in the employment of the respondents when the catalogue was being prepared. He stated that complainers' catalogue had been used to trace the designs from.

For the respondents the four partners of the firm gave evidence. Their statements were to the effect that if there had been any tracing from complainers' catalogue it was not by their instructions, and was not with their knowledge. They had instructed their draughtsman to copy from patterns, and these had been supplied for that purpose.

The Lord Ordinary said that the first question was whether there had been in fact an infringement of the complainers' copyright publication, assuming it to be a proper subject for copyright. Complainers contended that the catalogue had been prepared partly from original designs furnished by architects, partly from patterns in their own establishment, and partly from suggestions made by Mr. Macfarlane, the head of the firm himself, and that one distinguishing feature of the book was that it was desired to impart to the illustrations something of an artistic character to make it attractive to customers. This probably was a novelty, and it was easy to see, at all events, that in treating these subjects—most of them simple enough—there was an approach to something like individual character in the drawing and the shading. It was not necessary that a work should be original to have the protection of copyright. If that were so his lordship supposed very few publications would be entitled to protection; but the particular view, speaking of letterpress, in which an author presented the



subject on which he treated was entitled to protection, however old it might be, and however deficient in literary form or merit. However useless the work might be in a higher sense, if the author chose to publish his ideas in a certain form, he was entitled to this protection, that no one should either print the same words or give the same information in the same order, so that the Court or a jury would pronounce the two works to be substantially the same. His lordship was not aware of any distinction between literary and artistic work in this respect. The illustrations might not be original, but if any one, without the permission of the author, reproduced these illustrations either in facsimile, or with only such variations of outline and shading as would not prevent the two designs being recognised by competent judges as being substantially identical, then, in his lordship's opinion, that was an infringement of the copyright in the illustrations of the complainers' work. The Lord Ordinary then went on to point out that the evidence on the subject was of three descriptions—the impressions made upon the persons who saw the two books for the first time, and who had previous knowledge of the designs contained in them; the opinion of experts testing the drawings by various modes of comparison; and the direct testimony of persons engaged in the respondents' establishment in the preparation of the catalogue in question. On all of these three points the Lord Ordinary gave his opinion in favour of the complainers; and in connection with the last point he observed that the fact that the respondents had not put their head draughtsman into the box was too significant to require any comment. Coming to the two legal questions that had been argued, his lordship said the first was that the respondents being entitled to use Macfarlane's design for the purpose of their manufacture, they were also entitled to circulate copies of these designs among their customers. His lordship quite assented to the view that the respondents were entitled to use Macfarlane's catalogue for the purpose of their business within their own establishment. They might make patterns from it, and from these patterns produce castings, which they were free to sell to all the world; but the mistake which the respondents had made was in not recognising the distinction between the two things—that, while they had the right to use the designs in trade, they had no right to circulate copies of these designs among the public. The only remaining question was whether the complainers' work, being a mere trade catalogue, was a proper subject of copyright, and on this his lordship agreed with the judgment recently pronounced by the Master of the Rolls (Jessel) and Lord Justice Lindley, who held that a trade catalogue was a proper subject for copyright. On these grounds his lordship granted interdict against the respondents. He had a little difficulty as to the precise terms of the interdict, but his present impression was that he would interdict the publication of the section of the respondents' catalogue in its present form, reserving to them to re-issue such of the designs contained in it as were not an infringement of complainers' copyright.

### LABOURERS' DWELLINGS IN IRELAND.

THE following circular has been addressed by the Secretary of the Local Government Board to the executive sanitary officer of every rural sanitary district in Ireland:—

Local Government Board, Dublin :  
9th November.

The Local Government Board for Ireland have received several communications from sanitary authorities relating to the plans of houses to be erected under the Labourers' (Ireland) Act, 1883, and, while the board desire to interfere as little as possible with the discretion of sanitary authorities in regard to the plans and designs of such houses, they think it advisable to make known to them some of the conditions which the board will deem essential in arriving at their decision as to the sufficiency of any scheme, after the inquiry which may be held under the provisions of the seventh section of the Act.

I. The number of rooms must be sufficient to provide for the due separation of the sexes, and there should be a kitchen and at least two bedrooms in every house.

II. Every habitable room should have a height of not less than eight feet throughout, except in the case of a room constructed in the roof, when one-half of the area of the room should have a clear height of seven feet.

III. Each habitable room should have one or more windows of a total area of glass of at least one-twelfth of the floor space, and all bedrooms should be floored with boards or tiles; the ground-floor should be raised not less than nine inches above the level of the external ground.

IV. A proper privy should be constructed in each case separate from the dwelling-house, and distant at least ten feet therefrom; the floor should be flagged or otherwise rendered impervious, and raised at least four inches over the adjoining ground.

The plans and specifications which may be prepared by the architect or builder employed by the sanitary authority must be handed in to the inspector conducting the inquiry, who will submit them to the board for their consideration and approval, but the conditions specially mentioned above will be a guide to the sani-

tary authority in regard to the accommodation which should be provided in each house, and the sanitary arrangements which are deemed necessary.

### EXAMINATION PAPERS FOR ARCHITECTURE.

THE following are the sections relating to construction in the examination papers which were used at the last competitive examinations for draughtsmen in the Engineering and Architectural Department of the Admiralty, and surveyors' assistants in the Office of Works, and assistant surveyors in the War Department:—

#### Admiralty and Office of Works.

#### *Drawing and Design of Civil Engineering and Architectural Works. (Obligatory.)*

##### (a) CIVIL ENGINEERING WORKS. (Time allowed, 4 hours.)

1. A main line of railway runs at a sharp curve through a clay cutting; a public road is to cross it at a point where it is 40 feet deep. The material for the structure is a good laminated sandstone, but the arches are to be of blue Staffordshire bricks. Give a cross-section, to a scale of 10 feet to an inch, showing at least half of the cutting and line of way, with the roadway over it in elevation.

2. Give a line diagram of an iron roof truss over a 35-foot span, and make working drawings, half full size, of the joints at the head and one foot of the truss, showing the latter resting on the top of a cast-iron column 5 inches diameter at the neck.

All dimensions to be figured, and the drawings to be carefully coloured.

##### (b) ARCHITECTURAL WORKS. (Time allowed, 4 hours.)

A building is required for a village school without master's residence, to accommodate twenty boys, with school-room, class, and necessary conveniences. Give plan, elevation, and section to a scale of 4 feet to an inch. The plans and sections to be coloured.

The design may be in any style of architecture.

#### *Building Construction. (Obligatory.)*

##### PART I. (Time allowed, 3 hours.)

1. What limes and cements are best for employment in hydraulic works.

2. Give a section to a scale of 1 inch to a foot of a cast-iron girder to bear a safe distributed weight of 30 tons, the distance between the supports being 25 feet.

3. Show the best form of wrought-iron rivetted girder to support 60 tons in the centre, the distance between the supports being 38 feet.

4. Give section showing 18-inch wall and footing and concrete thereunder, and sleeper walls and sleepers and joists.

5. Show to 1-inch scale the best method of supporting the girders of a floor when supported by iron columns being continued to support the floors above.

6. Give the different character of foundation you would adopt in gravel, sand, and clay.

7. Give section showing dry area wall and proper tumbling in at top to keep the ground from main wall of building.

##### PART II. (Time allowed, 3 hours.)

1. Explain the meaning of the following terms, giving illustrations: Rebate, grove, tenon, joggle, scarf, dovetail, matched, and beaded joint.

2. Draw to ¼-inch scale section of a king post roof 25 feet span, showing to 1-inch scale the ironwork to the head and foot of king and foot of rafters.

3. Give sketch showing the form of bond to 9-inch, 14-inch, 18-inch walls, giving quoins in Flemish bond.

4. Give section showing double-framed timber floor to 1½-inch scale with scantlings of the timbers, the girders being 20 feet between the points of supports and the binders 8 feet apart.

5. Give horizontal section and vertical section of a part of double-hung sashes and frame to a 1-inch scale to a foot.

6. Give plan and section of a lead flat, the section to pass through a roll and drip showing the method of laying the lead.

7. The drain falls from the front of the house to the sewer 10 feet in a distance of 45 feet; explain how you would prevent the sewer gas rising into the house.

#### *Rudimentary Calculations of Strength of Materials of Construction. (Obligatory.)*

##### (Time allowed, 3 hours.)

1. Explain how the dimensions of a column under compression affect the ultimate resistance of the material per unit of area.

What are generally considered to be the limiting lengths of short columns under compression, both in wood and in wrought iron?

2. A short, solid, round bar of wrought iron has to resist a compressive stress of 24 tons. Determine its diameter



3. A beam over a 32-feet span is loaded with  $1\frac{1}{4}$  cwts. per foot run, with the exception of 8 feet at one end; determine the reactions of the supports.

4. A fir beam, 9 inches by 4 inches, spans a 10-feet opening; what central load would break it, taking the ultimate tensile resistance of the wood at  $1\frac{1}{4}$  tons per square inch?

What difference would it make if the load were distributed?

5. Explain the difference between cast and wrought-iron, and state their respective merits for constructive purposes.

6. Explain the action of sand in mortar-making, and why the purest limes carry the most sand.

7. Is it admissible to use salt water with limes and cements, and does it affect their strength?

8. Describe the characteristics of good bricks, and state the relative merits of kiln and clamp burning.

9. Describe the different classes of limestone used by builders, and the purposes for which they are most suitable.

10. What timber would you select for the following purposes?—Treads of stairs, floor boards, pile foundations, dock gates, planking of earth waggons, roof trusses.

*Measurement of Quantities in Building Works and Estimates of Cost. (Obligatory.)*

(Time allowed, 3 hours.)

1. In accepting tenders what is the usual arrangement for the adjustment of extras and omissions?

2. Show calculation and make estimate of cottage wall shown in accompanying section and elevation. The arch over window to be axed, sill to be of York stone 8 inches by 3 inches. The wall to be built of stock bricks with over-sailing courses under eaves as shown.

3. Give the mode of measurement of the stone cornice shown in sketch, assuming it to be 40 feet in length, and the stone of the average length under scantling.

4. What will be the cost of plastering a room 12 feet square and 10 feet high, having one window 3 feet by 5 feet 6 inches, and one door 2 feet 8 inches by 6 feet 8 inches, including walls, ceiling, and cornice 10 inches girt. The work to be three coat and the ceiling lathed.

5. The length of a wrought-iron girder is 20 feet, and the section is as shown in sketch; give the quantity of metal.

*Specifications for Building Works. (Obligatory for Works Office Candidates.)*

(Time allowed, 3 hours.)

1. The ground floor of a house front is required to be taken out for the purpose of inserting a shop front. Give a specification of the necessary works required in shoring up and for carrying the superincumbent wall. The frontage being 20 feet, the height of ground story 12 feet, and three upper storeys of a total height of 30 feet.

2. Give a specification of a lean-to shed, the roof a quarter pitch. The width of shed 10 feet, the bearing between front supports 12 feet, the parapet of end walls and back wall carried 1 foot 3 inches above the roof, the roof to be "Ladies" slating on battens and to be flashed and to have iron eaves, gutters, and down-pipe in front. The floor to be asphalted on proper foundation.

3. Write a specification of the best form of trussing a timber girder.

**War Department.**

*(a) Architectural Drawing. (Obligatory as alternative with b and c.)*

(Time allowed, 4 hours.)

1. Draw, to a scale of  $\frac{1}{4}$  inch to the foot, a front elevation and section of the upper portion of a Doric column with its entablature. The diameter (d) of the foot of the column to be 6 feet, and the proportions of the upper members may be approximately as follow:—

Diameter at top of column, about	$\frac{3}{4}d$ .
Depth of capital	$\frac{1}{2}d$ .
" architrave	$\frac{3}{4}d$ .
" frieze	$\frac{3}{4}d$ .
" cornice	$\frac{1}{2}d$ .

2. Draw, to a scale of  $\frac{1}{4}$  inch to the foot, the plan, half external elevation, half internal elevation, and section of an oriel window to be executed in stone with joinery fittings. The opening in wall of room to be 9 feet wide, the room 11 feet high, and its floor 14 feet above the ground. The style adopted, as also whether the window is fitted with casements or sashes, is left to your option.

Give details one-fourth full size of various parts.

N.B. The drawings may be finished in pencil.

*(b) Engineering Drawing. (Obligatory as alternative with a and c.)*

(Time allowed, 4 hours.)

The enlarged details of the iron roof truss on the accompanying plate (design for covered shed) are to be drawn to one and a

half times their present scale, commencing with the iron column, and going on to the details of the head of the truss, &c.

The drawings are to be inked in, and, at least the two first mentioned, to be carefully coloured.

*(c) Preparation of Working Drawings for Details of Builders Work. (Obligatory, as alternative with a and b.)*

PART I. (Time allowed, 3 hours.)

NOTE.—All drawings to be fully dimensioned.

1. In getting out the foundations of a four-storeyed building, it is considered advisable to carry the walls over a certain part, where the ground is treacherous, on a bed of concrete supported by 8-inch piles, 10 feet long. The walls above foundations are of masonry, 2 feet thick.

Give a section, to a scale of 2 feet to an inch, showing how you would propose to carry out the work.

2. The accompanying figure represents an iron roof truss over a 28-feet span, trusses 8 feet apart. Make working drawings, one-half full size, of the joints at a and b, assuming the form and dimensions of the different members.

3. Give working drawings showing all the details connected with the method of carrying the front hearth of a fireplace on an upper floor—1st, in the ordinary way; 2nd, using cement concrete, independent of the joists.

4. Give the central section, and a small portion of the elevation, one-fourth full size, of a wrought-iron plate girder to carry a wall, weighing three-quarters of a ton per foot run, over a 20-feet span. The girder not to be over 12 inches deep.

5. Give, to a scale of one-twelfth—1st, a section through four steps at the head of a wooden stair, suitable to a good dwelling-house, showing the method of carrying them; 2nd, a cross-section through the handrail, stair, and a 9-inch wall.

PART II. (Time allowed, 3 hours.)

NOTE.—All drawings to be fully dimensioned.

1. A French casement window, leading from a sitting-room into the garden, is required to be weather-tight. Give sections, one-sixth full size, through the frame, set in a 14-inch wall, the meeting styles, and sill.

2. A brick chimney-shaft, 7 feet 6 inches long, runs up through a slate roof, parallel to the ridge, and a little below it. Show, by plan and sections, how the gutter in rear would be formed. The cross-section to include three courses of slates.

3. A boiler is to be fixed to a kitchen grate to supply hot water to a bath and housemaid's closet on the first floor. Taking an imaginary section of the house, show, by a skeleton diagram, every detail connected with the proper working of the system, naming the object of each part.

4. Give, to a scale of 1 inch to a foot, a section through the panels of an internal door suitable to a first-class house; also through one jamb, showing a lath and plastered stud partition.

5. A 6-inch drain runs under a house, from back to front, to join the sewer beneath the road in front. The drain is not to be disturbed within the house. Give a detailed drawing of whatever you may consider advisable in order to render the house secure against sewer gas, with any written explanation you may think necessary.

*Theory of Construction. (Obligatory.)*

(Time allowed, 3 hours.)

1. A beam AB 20 feet long, supported at both ends, is loaded as follows: 8 cwt. at 4 feet from end A; 12 cwt. at 8 feet from A; 14 cwt. in centre; and 16 cwt. at 15 feet from A. Determine the shearing stress at a point 6 feet from A.

2. A traveller, consisting of two Memel beams, trussed with timber struts and wrought-iron ties, as in the annexed diagram, is required to carry a load of 5 tons.

Determine the stresses on the different parts when the load is over a strut, and give the dimensions necessary to take these stresses safely.

3. A cast-iron cantilever of uniform strength and uniform breadth is required to support a uniformly distributed load. What should be its longitudinal section? Show by a figured sketch the distribution of the metal in the cross-section.

4. An ordinary slated roof, with common rafters and purlins, is supported by timber queen-post trusses of 36-feet span. Rise one-fourth span; 10 feet centre to centre.

Determine (by graphic process if you can) the stresses produced on the different parts by the ordinary allowance per foot super. for roof and snow.

5. A buttress of masonry weighing 140 lbs. per cubic foot, of the form of the accompanying diagram and 5 feet uniform thickness, with a pyramidal top, has to sustain the two thrusts shown.

Is the buttress liable to overturning about either point A or B? If unstable, show how the defect could best be remedied.

*Strength and Quality of Materials. (Obligatory.)*

(Time allowed, 3 hours.)

1. What are the distinguishing characteristics of the following bricks: Common stocks, blue Staffordshire, malm bricks, and for what purposes are they respectively used?



2. A pier of ordinary brickwork in blue lias lime mortar, 16 feet high, has to carry a load of 30 tons. What should be its section?

3. Write a specification to govern the supply of Portland cement for concrete work; and state what precautions you would use in storing a large quantity of it.

4. What description of stone would you employ for the following purposes: Stable paving, internal stairs, external stairs for heavy traffic?

5. Describe a natural and an artificial process of seasoning timber. State the object of the process, and the length of time required to fit timber for carpenters' and joiners' work respectively.

6. Distinguish between the following classes of timber, and state the uses to which they are respectively put: Red fir, spruce, yellow deals, American yellow pine, pitch pine.

7. What advantage is gained by cutting and reversing the halves of a timber girder, without inserting a fitch?

8. Write a specification for the iron tie-rods of a roof, and state what tensile strain may safely be put on them.

9. What materials are used for the different coats on an ordinary lath and plaster ceiling, and in what proportions are they mixed?

10. What is the composition of plumber's potmetal, and also of a solder for brazing? State what flux would be used for soldering tin and brass respectively.

*Description of Workmanship, Tools, and Plant. (Obligatory.)*

(Time allowed, 3 hours.)

1. In bricklayers' work what is the meaning of the term "larrying," and how is it performed?

2. Of what members does an ordinary builders' scaffolding consist, and how are they put together?

3. What means are usually adopted for lifting and setting heavy stones?

4. Describe shortly the different stages in the reduction of a roughly rectangular block of stone to the form of a groin-stone about half-way up the intersection of two vaults.

5. What is the distinction between carpenters' and joiners' work; and what difference is there in the tools used by them?

6. What is the essential difference between a jack-plane and a trying-plane, and how does the difference affect the work for which they are intended?

7. For what purpose does a smith use top and bottom swages, and how?

8. Describe the process of forming an ordinary wiped joint on a lead pipe.

9. Mention the tools commonly used by a slater, and their respective uses.

10. What is the meaning of "render, float, and set?" Describe the processes.

11. Describe in order the different processes involved in painting and flattening a new deal door.

*Analysis of Prices. (Obligatory.)*

(Time allowed, 3 hours.)

1. Determine the cost, per rod, of  $1\frac{1}{2}$  brick walling in lias mortar, built of hard stocks, faced with good red facers, neatly jointed outside and left rough on inside.

2. Work out the cost of eighteen ordinary window-sills of Portland stone 4 feet by 12 inches by 6 inches.

3. Determine the cost of a wooden floor to a first-floor room 15 feet by 20 feet. The boards to be in batten widths, grooved and tongued, and cut out of 3-inch deals; and the joists to be 10 inches by 2½ inches, cut out of the log.

4. Determine the cost in materials and labour of re-painting 500 yards of walling, two coats common colour.

5. Estimate in detail the cost of 500 yards of lath plaster float and set, in ceilings.

6. Estimate the cost of two heel straps for the principals of a timber roof truss. The depth of strap to be 13 inches, the breadth of the tie-beam being 5 inches.

*Measuring and Estimating Builder's Work, Taking out Quantities from Drawings, Preparing Abstracts and Bills of Quantities. (Obligatory.)*

PART I. (Time allowed, 3 hours.)

1. Describe, briefly, the different methods of arriving at the probable cost of a proposed building.

2. Explain the ordinary arrangements entered into for carrying any large work into execution.

3. How are the following items of bricklayer's work usually measured up and paid for? Well-sinking and steining in ordinary ground, concrete in foundations to paving, gauged arches to openings, brickwork to coppers, setting grates, raking and pointing to lead flashings.

4. In mason's work state how the following items are measured and paid for: rail-holes and cramps let in with lead, common sections of curbs and window-sills.

5. How are the following items measured and paid for? Plaster cornices, cement skirtings, staff-bead in cement, rough-cast.

6. How would the painting and glazing of circular fan-lights be measured and paid for?

7. Estimate the cost of subsoil draining a field 250 yards by 150 yards, the soil being a stiffish clay. There is gentle fall across the breadth of the field.

8. Measure up and give an estimate of the cost of making a new ordinary window in a room, the outer walls of which are 14 inches brickwork. To be properly finished with a window-board, and splayed and moulded jamb-linings.

PART II. (Time allowed, 4 hours.)

Measure up, abstract, and make out a priced bill of quantities of all the work required to be performed in the erection of the covered shed shown on the accompanying plate. (Design for covered shed.)

LOCAL BOARDS AND NEW BUILDINGS.

THE following information respecting the authority of local boards, in dealing with new buildings, has been prepared by the clerk of the Ealing Local Board at the desire of some of the members:—

What is the practice with reference to buildings of which plans are sent to the board for approval? Is it lawful for such buildings or alterations to be proceeded with before the plans have been approved by the board?—*Answer*: The Public Health Act, 1875, sec. 150, provides that where plans are required by any by-law made by an urban authority to be laid before that authority, the authority shall, within one month after the plan has been delivered, or sent to the surveyor or clerk, signify in writing their approval or disapproval to the person proposing to execute the work. If, before the expiration of the month, the work is commenced without such approval, and is in any respect not in conformity with any by-law, the authority may cause the work executed to be pulled down. It, therefore, seems that persons, having sent in plans, may at once proceed with the buildings or alterations, but do so at their own risk. The board cannot interfere, so long as nothing is done contrary to the by-laws or the Act of Parliament.

In the event of violations of the by-laws for new streets and buildings, if such violations have been shown on the plans submitted to the board and passed inadvertently, what is the remedy?—*Answer*: No provision is made in the statute or in the by-laws for such a circumstance as that contemplated by the question, and a very difficult point arises as to how far the approval by a local board of plans, &c., which show violations of by-laws, will relieve the persons executing works from the consequences of such violations. My opinion is that, if persons execute works so as to commit breaches of the by-laws, they render themselves liable to the penalties pointed out as applicable to such cases, notwithstanding the fact that the board may have inadvertently passed plans showing the violations, because the board cannot legalise that which the statute and the by-laws declare to be illegal; but it is very doubtful whether, under such circumstances, any Court would exercise its process in cases of this kind. It appears to me there are two states of affairs which may exist when plans have been so passed. (1) Where nothing has been done by the person executing the works which will seriously affect him, should the by-laws be enforced. In this class of cases I should advise that a notice be at once served, calling attention to the by-laws, and requesting compliance therewith; and in the event of failure to comply, there would probably be no difficulty in obtaining a conviction. (2) Where the plans, having been passed, showing breaches of the by-laws, and work has been done by the person sending in the plans, and he would suffer loss if the by-laws were then enforced. In such a case I am of opinion that, although it might be open to the board to prosecute the offender, still no Court would inflict more than a nominal penalty, if any.

In the event of violations of the above-named by-laws, and such violations have not been shown on the plans, what is the remedy?—*Answer*: The remedy is by proceedings before the Justices, as provided by the 98th by-law and the Public Health Act, 1875, sec. 251.

In your opinion is it necessary for a street to be open at both ends to be considered a carriage-road? (See clause 8, page 5, by-laws on new streets; see Stratford Place, Oxford Street.)—*Answer*: There is no definition of the word carriage-road either in the Public Health Act or in the by-laws, and the ordinary meaning of the term must therefore be considered as applicable. I am of opinion that carriage-road *primarily* means a road capable of accommodating carriage traffic; and, further, that it is not necessary for a street to be open at both ends in order to be a carriage-road within the by-laws; but, from the other point of view, it must not be taken for granted that *every* street laid out as a carriage-road, and less than 100 feet in length, is subject to the provisions of the by-laws relating to streets intended to be used as carriage-roads.



## NOTES AND COMMENTS.

THE subject of illicit commissions has again cropped up, and will give journalists an opportunity for publishing a great many articles in which slanders against architects will be insinuated, or stated in terms so general that no legal remedy is possible. The letter from the editor of *Truth* differs in character from the letters which were printed a couple of years ago. We may be sure that it is not rashly penned, but is based on information which has been supplied to the editor, and in which he believes. Now, we know that a few firms who have been disappointed in obtaining orders have lately stated that their failure can be attributed to their opposition to the system of giving commissions to architects. It is possible that some of those letters have reached the office of *Truth*, and have inspired the statements which to outsiders appear so circumstantial. It will be seen that the Institute repudiates the charges, and lately similar charges were more publicly repudiated at Glasgow. The editor of *Truth* is not wanting in courage, and he has torn the masks off many living shams and rogues. He has now an excellent opportunity to do us all a good turn. Let him give the particulars of one case in which an architect has taken a commission from tile-makers or stove-makers, and he need have little fear of the consequences. He would find enough supporters among architects to secure him against loss. Mr. LABOUCHERE will of course say that in the address of Mr. COLE ADAMS there is evidence to show that the practice is common enough. When the President of the Architectural Association is heard to speak of the system as "a cancer, which, when once it has fastened on the system, grows and sends its poisonous fangs in all directions, until all that is best and noblest in a man's nature gives way to it," he must have been satisfied of the power of the evil with which his auditory had to contend every day.

THE Bishop of LIVERPOOL appears to be desponding about the success of the cathedral scheme. At the present time the services in the pro-cathedral have entailed an additional expense of about 500*l.* a year, and to obtain that sum the honorary canons have to canvass their friends. The bishop considers that the indifference of Churchmen in the matter is one of the "black spots" in the diocese. Under the circumstances, it is not clear how the more expensive services in a new cathedral can be undertaken. "I sometimes doubt," the bishop says, "whether the zealous advocates of a building worthy of Liverpool have ever considered that the building will be useless without an endowment to support its services, and that to provide a suitable endowment for deans, canons, organist, choir, and other officials will require a capital sum of at least 100,000*l.* Now where is that endowment likely to come from when we cannot get such a paltry sum as 500*l.* a year for our present cathedral service?" But, in spite of the anticipated poverty of a cathedral, the organising committee are engaged in seeking a site for the new building.

THE sacredness that is attached to trees in a proprietor's eyes has been diminished by a decision which has been given in the Scottish Court of Session. A merchant took a lease of some ground on which was a cottage. The latter was overshadowed by trees, which were an obstacle to light and air, and the dripping of the rain from them kept the roof damp. The leaseholder, naturally regarding the trees as being detrimental to the amenity of his house, cut down four of them, and claimed the right to remove as many as should be necessary. The owner took an action, and claimed 100*l.* damages. The judge before whom the case was tried assessed the damages at 10*l.*, and made an order prohibiting the tenant from interference with the remaining trees. There was an appeal from this decision, and it has been set aside. That a proprietor had generally a right to the timber on his property was not questioned; but inasmuch as in this case the lease was a building lease, the rule was supposed to be inapplicable, because the tenant was entitled to the reasonable enjoyment of that which was the primary purpose of the ground, and therefore could remove whatever interfered with his rights.

AN interesting festival was lately held in the Waterloo Road. The parish of St. Mary, Lambeth, possessed in 1818

but one church for about 50,000 inhabitants. At that time the Exchequer was enriched by a windfall, which came from some mysterious source abroad, possibly from the Austrian Government, and in consequence the large sum of one million was set aside for church building. Four buildings were erected in Lambeth parish. One of them is the mongrel Doric Church of St. John, which stands nearly opposite. The site was a horse-pond, and it was only by piling that a foundation could be obtained. The foundation-stone was laid on June 30, 1823, and the church was opened on November 3, 1824. The architect of the building was Mr. F. BEDFORD, who designed some others of the South London churches. The only noteworthy feature in the church is the monument of ELLISTON, the comedian and manager.

A BILL is to be introduced into Parliament during next session to authorise the purchasing of additional premises for the site of the proposed Museum of Science and Art in Dublin. The Commissioners of Public Works in Ireland seek for power "to purchase and take, by compulsion or otherwise, within three years from the passing of the Act, the fee-simple and inheritance in the dwelling-houses, offices, grounds, and premises known as Nos. 7, 8, and 9 Kildare Street, and part of the laneway at the rear of same; also the laneway known as Kildare Lane on the south side of the dwelling-house No. 9 Kildare Street; also part of the house and ground of the dwelling-house known as No. 1 Kildare Place; and also a certain out-office and ground at the rear of the dwelling-house No. 1 Upper Merrion Street." The premises have been shown on the diagram-plan supplied to competitors.

WHAT meaning is to be attached to the word "elevation," when it appears in a deed relating to houses? Is it height, or appearance? The only technical definition of the word by JOHNSON is as an astronomical term. But in DYCKES'S Dictionary—which was also compiled in the last century—elevation is said to signify "the scenography or perspective view of a building; it is also used for the orthography, or plan of the front of a building; by workmen vulgarly called the upright of the building." In the "Imperial Dictionary" of 1882, it is said to be "a geometrical representation of a building in vertical section, as opposed to the ground plan." How far are definitions like the above applicable to a clause which says that "one corner tenement shall be of the same or similar elevation as nearly as may be with the houses already built"? A firm of builders in Glasgow have been erecting a house in Athole Gardens, of four storeys in height; but the remaining houses are only three storeys, and the proprietors of them—to the number of eighteen—relying on the clause, endeavoured to obtain an interdict against the obnoxious fourth storey, and thus to insure uniformity of appearance. The builders relied on another deed, which authorised the erection of two corner houses of four storeys, which were to be similar to the other houses, "so far *inter alia* as elevation is concerned." One Sheriff interpreted the word elevation as favouring uniformity of height, and ordered the fourth storey to be instantly removed. But the Sheriff Principal when appealed to arrives at a different opinion, and legalises the fourth storey.

ACCORDING to the Sheriff Principal the word elevation does not necessarily mean height and number of stories, but rather "the appearance and fashion of the edifice as seen above the ground, in opposition to the ground or sectional plans, so that when the building is said to be of the same or similar elevation with another, this merely means that it is to be of the same or a similar architectural design." The Sheriff Principal considers that his view is confirmed by the very words of the original deed, which provided for the erection of three storey and four storey houses. The height and number of the former had been fixed, and similar elevation must therefore mean something else, which can be nothing but external appearance, fashion of architecture, and the like. As the case is to be brought to a higher court it is hardly safe to discuss the point that is involved. Although among architects the word elevation is sometimes used in the sense suggested by the Sheriff Principal, that meaning is not found in dictionaries. As the word in its popular sense is associated with height, there is ground for the assumption that the lawyer who drew the deed was thinking of height, and not of effect.









DESIGN FOR CHURCH OF ALL SAINTS, IPSWICH.

By SYDNEY VACHER, A.R.I.B.A.

Sprague & Co. 22, Mark Lane, Cannon St. EC







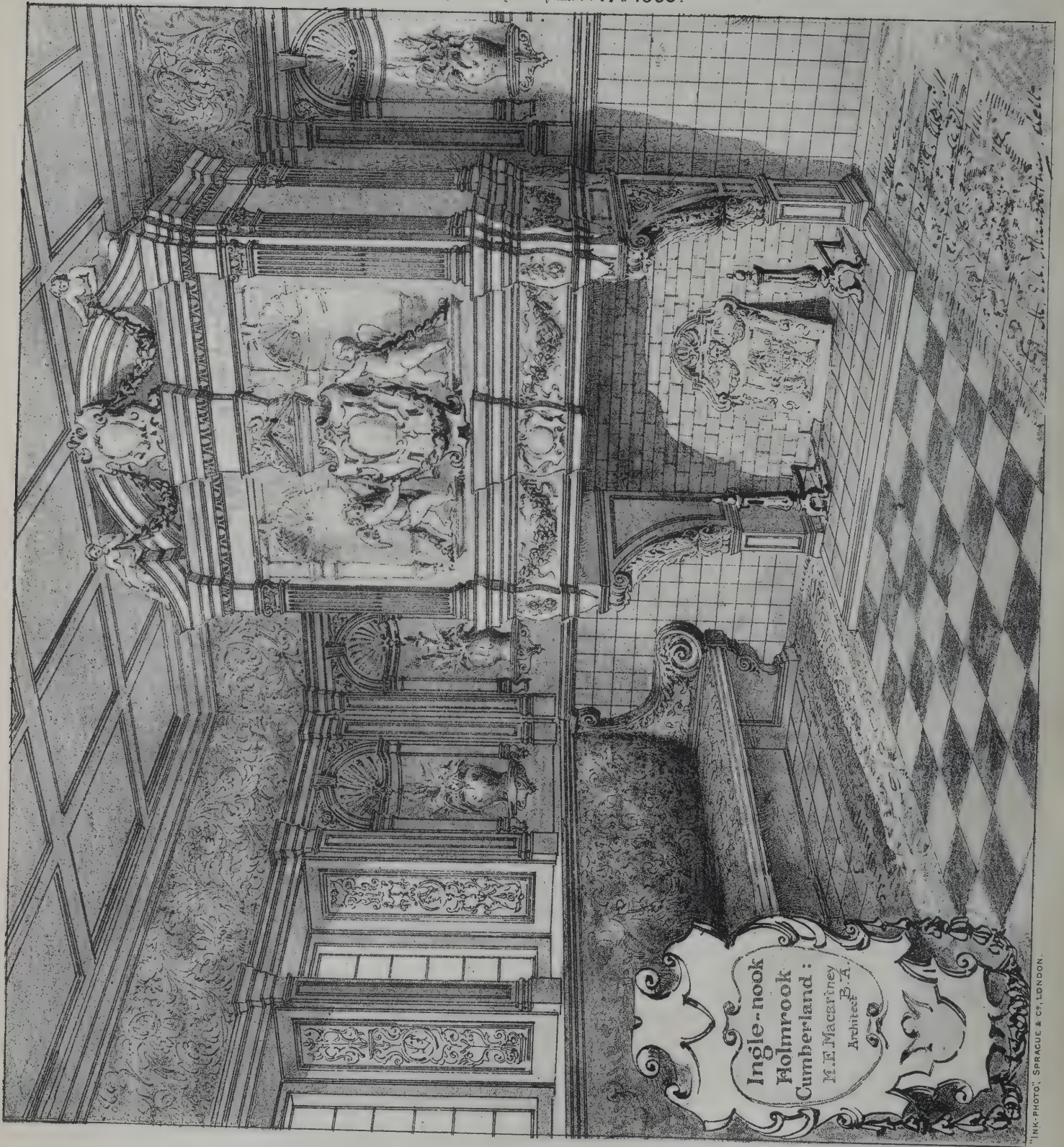


LIVERPOOL ZOOLOGICAL GARDENS.  
*Plan, elevation and other particulars, by J. H. Sturges, Esq., 1883.*  
View of Entrance Lodge  
in RICE LANE





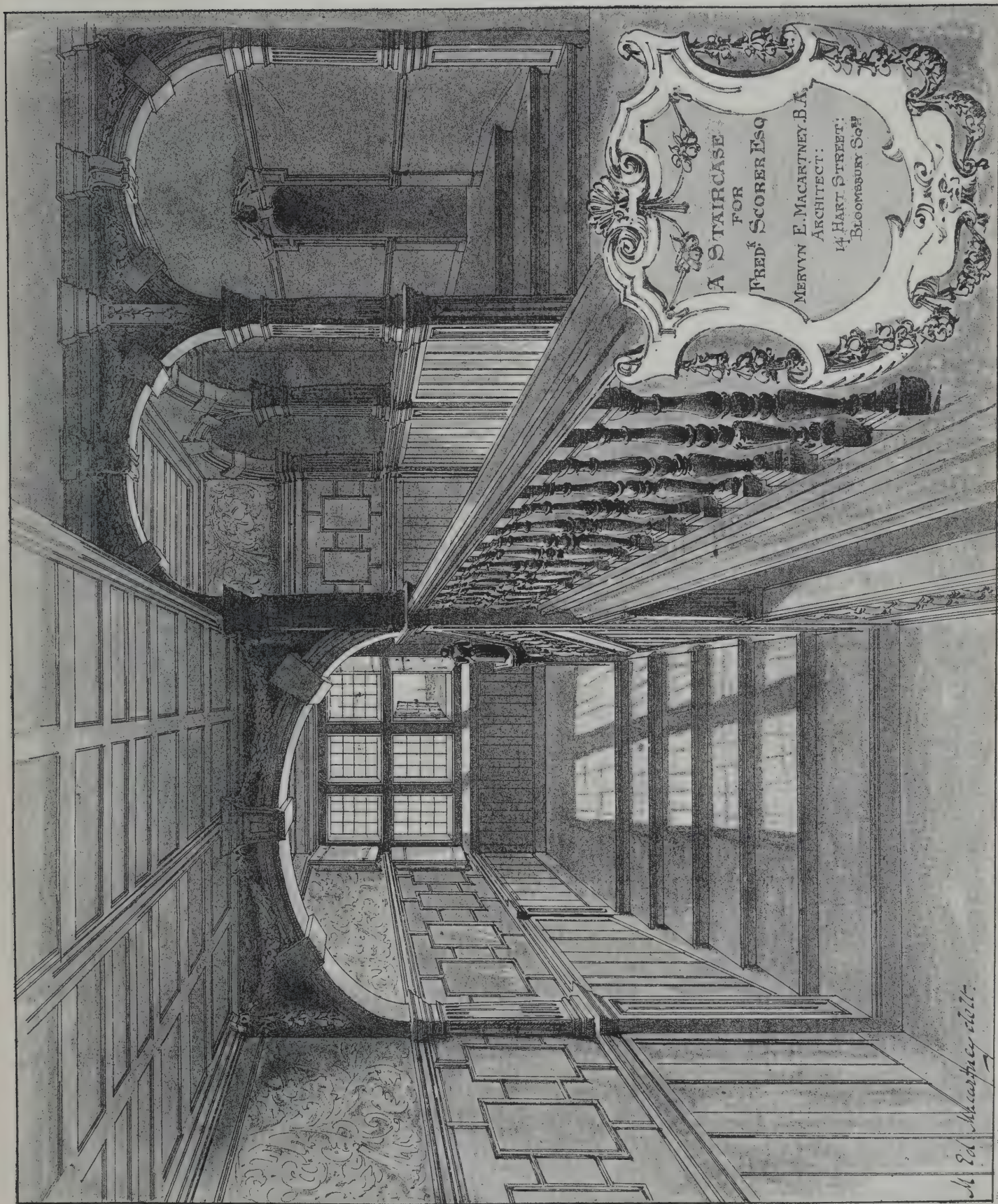




Ingle-nook  
Holmrook  
Cumberland:

M. E. Macartney  
P. A.  
Architect.





A STAIRCASE  
FOR  
FRED. SCORER ESQ

MERVYN E. MACARTNEY B.A.  
ARCHITECT:  
14 HART STREET:  
BLOOMSBURY SQ<sup>W</sup>

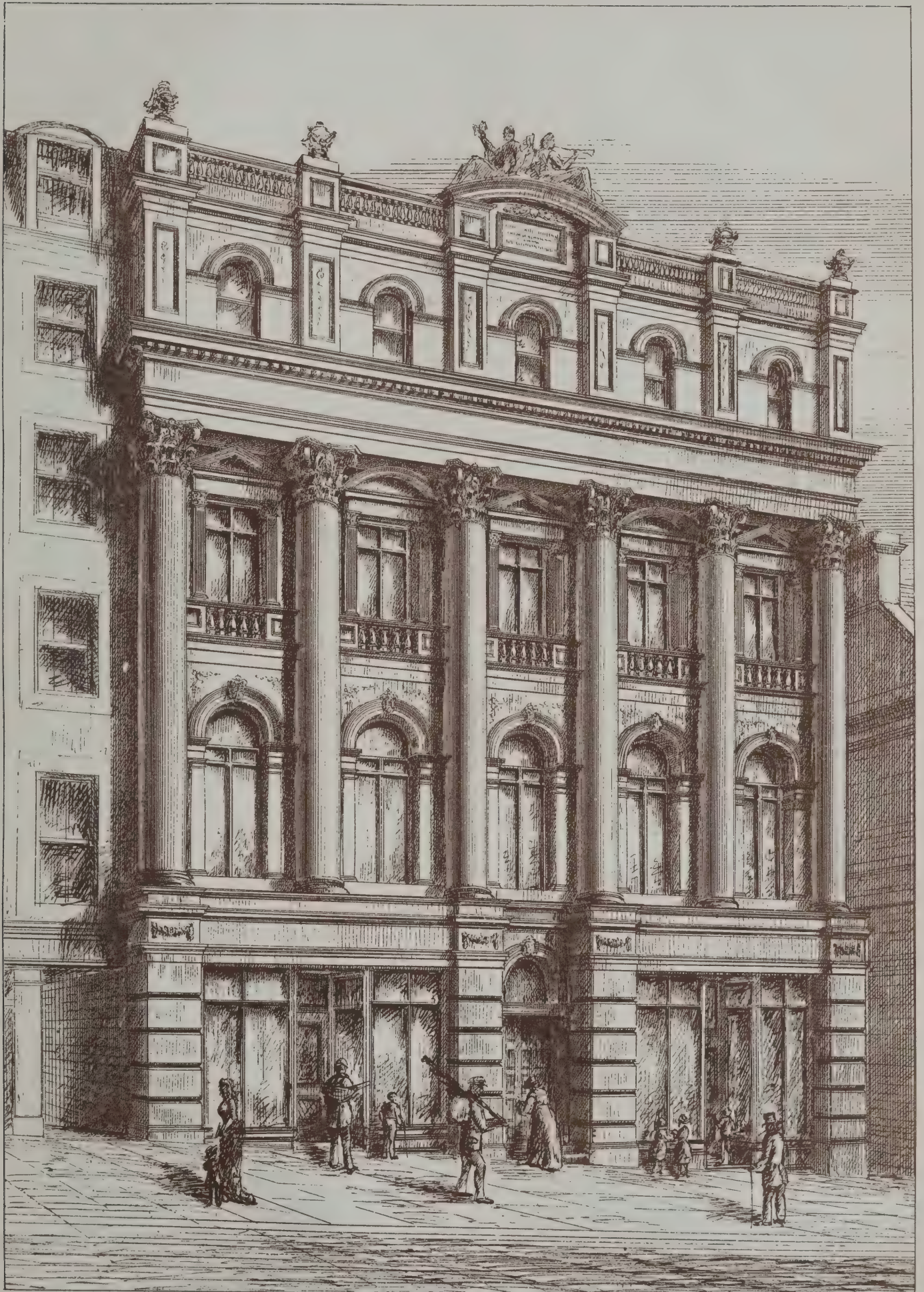
M. E. Macartney del.

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CARRUBBERS CLOSE MISSION BUILDINGS, EDINBURGH.

JOHN ARMSTRONG, ARCHITECT.









DESIGN FOR CHURCH OF ALL SAINTS, IPSWICH.

By SYDNEY VACHER, A.R.I.B.A.



HOUSES & SHOPS, NEWCASTLE, STAFFS.

MESSRS CHAPMAN & SNAPE, ARCHITECT.







## ILLUSTRATIONS.

STAIRCASE FOR MR. FREDERICK SCORER.

THIS staircase was designed for a house just completed, from the designs of Mr. MERVYN E. MACARTNEY, for Mr. SCORER, at Westerham. The material employed was oak.

INGLENOOK, HOLMBROOK.

THIS drawing shows a portion of the Inglenook designed by Mr. MACARTNEY for the billiard-room, Holmrook Hall, Cumberland, the seat of Major FLETCHER LUTWIDGE, J.P. The chimney-piece is to be executed in marble, and the panelling and seats in walnut.

THE LIVERPOOL ZOOLOGICAL GARDENS.

THE close of this century seems likely to be distinguished by its crusades against the myriad material ills that civilised flesh is heir to. To-day social reformers and political party chiefs are unveiling the foul recesses of squalid life in large towns and cities, revealing a state of things which only needs to be fully known to be doomed, and South Kensington is busily promoting the study of the newly popular science hygiene in her *alma mater* and its numerous affiliations. Whilst the Free Library and Museum have taken the field against the gin palace, the preservation—for dear life's sake—of public parks and open spaces, and the formation of zoological and botanical gardens, is carefully regarded.

The land secured by the Company for the Liverpool Zoological Gardens, about thirty acres in extent, is easily accessible from a populous neighbourhood, and lies within quite a network of railways of the principal northern companies. Over these picturesque views are obtained of the open country beyond. As it is within about a mile of the sea, and occupies an elevated position at Walton-on-the-Hill, freedom is insured from those atmospheric impurities which injuriously affect animal and vegetable life alike. The preliminary contracts for the enclosure of the Gardens are now let, and this week the "first sod" was cut.

The entrance we illustrate will be used pending the undertaking of the large crescent entrance block, for which plans have been prepared, and which is to include hotel, temperance refreshment house, shops, and accommodation for learned societies for the study of various branches of natural history, with their libraries and collections. The lodges are built of rubble stone, rough cast on the outer face, with red brick pilasters. All the stone is from the Everton quarries. The decoration in the gables is to be simply and boldly modelled on the wall in Portland cement. The architects to the company are MESSRS. WILLIAM SUGDEN & SON, of Leek.

CARRUBBERS CLOSE NEW MISSION, HIGH STREET, EDINBURGH.

THE foundation-stone of the mission hall which is illustrated this week was laid on April 24 by Mr. D. L. MOODY, and the building is now in progress. The site is at the head of High Street, a continuation of the well-known Canongate, and adjoins the house of JOHN KNOX, the reformer. The frontage is nearly 60 feet, and the building, with its cut stone front, will form a marked contrast to the adjoining houses, which are occupied in tenements by a humble class of people. The lower part is arranged as shops. There will be a large hall capable of seating 1,400 or 1,500 people, and two smaller halls. The rooms will include drawing-room, committee-room, and other offices on the first floor, while on the second and third flats ample accommodation is to be provided for conducting various classes. There is also a janitor's house. Due attention has been paid to ventilating and heating arrangements. The sum of 11,000*l.* has been collected towards the cost of the buildings. The architect is Mr. JOHN ARMSTRONG, of 2 Queen Street, Edinburgh. The contractors are as follows: GEORGE ALEXANDER, mason and bricklayer; DAVID GREIG, carpenter and joiner; JOHN WHITE, plumber; THOMAS TAIT, ironfounder; Messrs. DOBIE, painters; Messrs. GRAHAM, slaters; Mr. LAWSON, glazier; Messrs. MACLELLAN (Glasgow), iron girders. The stained lead lights are by Mr. GRAHAM ROSS—all of the city of Edinburgh. The plaster work is by Mr. DEWAR, Portobello. The works are carried out under the superintendence of Mr. WILLIAM PATISON, clerk of works.

DESIGN FOR THE IPSWICH CHURCH.

IN this design, which was submitted by Mr. S. VACHER, A.R.I.B.A., care has been taken to keep the expense as low as possible consistent with good church arrangement and building. The chancel would be large enough for the nave, and has only splayed angles for the chancel arch to spring from. The windows are placed as high up as possible, thus giving a grand effect, and enabling the largest number to see. The pulpit is placed so as to command the greatest possible number of people sitting in the aisles. The gangways at either end of the nave work satisfactorily in practice, the door at east end of aisles being used for exit only. The chief aim has been to get effect by caring for the proportion.

HOUSES AND SHOPS, NEWCASTLE, STAFF.

THIS terrace of houses has been lately erected from the designs of Messrs. CHAPMAN & SNAPE, of Newcastle, Staffordshire.

## THE ARCHITECTURAL ASSOCIATION.

THE first ordinary meeting of the association for the present session was held on Friday evening, the 9th inst., Mr. Cole A. Adams, president, in the chair. The following gentlemen were elected members: Messrs. J. M. Townsend, A. C. Couldery, and B. A. Slade.

A vote of thanks was passed to the gentlemen whose labours had so greatly conduced to the entertainment of the members at the late conversazione, and especial mention was made of the name of Mr. H. D. Appleton.

The PRESIDENT announced on the part of Mr. Tarver that a prize would be offered in connection with his class for the best series of illustrated notes.

The following vote of condolence on the death of Mr. Paice and Mr. Page was, on the motion of the president, unanimously adopted:—

"That the Architectural Association desires to place on record its feeling of indebtedness to the late Bowes A. Paice and Richard C. Page, for much good service, marked by courtesy and consideration, rendered by them in the past; and its sense of the loss to the profession of two men of such ability cut off before they had opportunities of permanently showing their talent; and it tenders its respectful sympathy to the relatives of those gentlemen. And further, that a copy of this resolution be sent by the hon. secretary to the friends of each of them."

Mr. J. DOUGLASS MATHEWS presented the annual balance sheet, which was adopted. He then proposed a vote of thanks to the auditors, Mr. Cuxon and Mr. York, which was carried. In the course of his remarks Mr. Mathews alluded to the arrears due in the way of subscriptions, and said that the greater part of the subscriptions at present paid for the past session had only come in three weeks previous to the audit.

## The President's Address.

The PRESIDENT said:—

Last Friday week we had the pleasure of meeting together in social intercourse; to welcome and entertain our guests; to applaud the recipients of the prizes, and study and admire the objects displayed on the walls of the galleries. It was, so to speak, the last day of the holidays—the last day of carnival—when the Architectural Association holds high festival. To-night we meet together in our working clothes; holidays are over; prizes have to be won, and the drawings to cover the walls for the next conversazione have yet to be made. This is the first night of the new session—the first night for work.

It is well on such an occasion as this to take a general review of things, so that before we start on the march of another session, we may with what calmness we possess look back over the ground of the past session, and see whether the progress has been real and direct. Then, dwelling not too long upon what is passed and cannot be retraced, to turn our eyes steadily in front, and scan the country and the goal which lies before us. Retrospection has its great value, if we use it rightly, for teaching what to avoid in the future, and I propose to the best of my ability to review the work and its results done in the association during the session which has become part of our history, and to do so, I must refer to the rather dry details afforded by the very useful statistics published in the Brown Book.

It may not be out of place here to say a few words on the subject of this said Brown Book, with which we are all so familiar. You are aware that the secretaries of the various classes prepare the statistics and reports which they forward to the secretaries of the association, but perhaps very few of you are aware of the enormous amount of labour the compilation of the work throws upon these gentlemen. I had not myself, until from my official position I could peep behind the scenes, and see what it meant to bring out this useful little book. The demands made upon the



time of these gentlemen are very large, the labour very great, and the sources from which the necessary information has to be gathered, the numerous people who have to be consulted, written to, and got at, so large, that the wonder is that men living the busy life our secretaries do, not only perform their duties, but do so cheerfully, sacrificing, I much fear, paying work to voluntary labour in our service. I think we do not sufficiently appreciate, I believe through ignorance of the facts, the immense obligation the Architectural Association is especially under to our secretaries; and I cannot let this opportunity go by without testifying my, and I believe your, sense of gratitude, not only in this compilation of the Brown Book, but in whatever work comes before them. The growth of the Architectural Association has so added to the labour of carrying on the work of it, that I think the time must shortly come, when the least we can do in acknowledgment of such services will be to find some paid assistance to do such routine work as could be taken off the shoulders of the gentlemen for the time being serving in the capacity of secretaries to the Architectural Association, leaving them more leisure for the discharge of duties requiring that tact and courtesy which in my experience have never been wanting. With this digression, for which I make no apologies, I must return to my starting-point.

Taking the list of members from the last edition of the Brown Book, we find that 786 are resident in London, 174 elsewhere—total, 960. Out of this list a fair deduction must be made of men who are in practice, or who have in previous years passed through the classes, but still remain members. What this proportion is I am not able to say. From statistics kindly furnished me by the gentlemen acting as secretaries to the classes and lectures, I have ascertained that last session 190 members, or thereabouts, including country members, availed themselves of the advantages offered by the classes and lectures, and thus, out of 960 on the list, about one-fifth. It must further be noted that this number includes all the names supplied me as having attended at some time or other; but experience goes to show that, though at the beginning of a session men attend the various classes and lectures in strong numbers, towards the middle and end they drop off. A further analysis of the lists supplied me show that, out of these, two gentlemen attended five classes and lectures, six attended four, nineteen attended three, and forty-one attended two.

Are these results as satisfactory as they ought to be? I hardly think so. There is sometimes a danger in multiplying advantages, and doing too much to make the paths easier; it removes that spur to self-help which some natures need. I, however, strongly appeal to all students to-night to hasten and avail themselves of the privileges open to them, and to remember that, apart from what is offered you here, you have a large field for improvement offered you at University College, King's College, and at the British, South Kensington, and Architectural Museums, where careful and serious study would fit you for great things.

Looking through the statistics given in the Brown Book, we find that "design" numbers 479 attendances, "construction" 784, as against the previous session, when "design" scored 711—being 232 more attendances—and "construction" 763, or 21 less than last session. In looking at these statistics it must be remembered that in this past session none are given for the "colour" class, which in the previous one recorded 52 attendances. But the fact remains that "construction" is 305 ahead of "design," as against 52 the session before—which is certainly rather startling—a majority six times larger.

No one will grudge "construction" such very satisfactory results. The importance of science in relation to architecture no one will dispute; and those who have the management of the classes and lectures devoted to this branch are to be heartily congratulated, and we can only hope that this present session may swell the numbers still more. Why is it, however, that "design" falls so far below the standard of the former session, and, I fear, far below previous ones, if the statistics were worked out? It is a question which we ought to face seriously. That the science of construction should claim the attention of more students than the art of design need surprise no one, I think, inasmuch as most minds are attracted to what can be demonstrated and proved—science accepting nothing on faith; and with ordinary ability, coupled with perseverance, the principles and practice of construction may be mastered without much difficulty, though to succeed in the higher branches requires, of course, a higher order of intellect. The faculty of design is, it will be generally conceded, a much rarer gift, without which a man cannot be an architect in the true sense of the term. He may be able to raise a building, fulfilling every condition of sound construction, but destitute of every quality which pleases the cultivated eye. Design not only demands the inventive faculty, but also the higher gift of imagination and the qualities of the poet and artist, and such gifts are rare.

If you admit this brief definition to be a correct one, we are still brought face to face with the problem, Why has our society so fallen in its "art" results this past session? A review of the progress of art generally, throughout all its branches, does not to my mind give a solution of it. The progress in architecture, sculpture, painting, and the decorative arts during the last quarter of a century has been great, and in our own art especially so. I

think perhaps one—if not the chief—cause of the falling-off we are now considering, is due to the rather chaotic and transitional state which is now existing in the school of thought as applied to architecture. The great Gothic wave has spent itself, and though we have works and men of whom we may be justly proud, we cannot, enthusiasts though we may be for our first love, say that she claims the devotedness which characterised our admiration of a few years back; and, pursuing the metaphor, the heart has grown cold in many, and nothing has yet risen up to fill the void. History is again, in Gothic art, repeating itself. Our masters of the revival preached that the only salvation was in the pursuit of the earlier, and as they thought, purer styles of the Christian art; and in these latter days a school has arisen which forsakes that teaching and preaches that the better art is in the later styles, and in the "flat and pointed." Others worship at the Jacobean shrine, make votive offerings at the tomb of Queen Anne, find even something to admire in Georgian relics, until maybe the student shall wander into Gower Street, sketch-book in hand, and there, let us hope, stop. What shall the poor student of architecture do, where shall he go, who guide his weary footsteps in the pursuit of the true and the beautiful? With the decline of the Gothic revival, enthusiasm, the great spur to good architecture, is dead, and we need some Peter the Hermit to rise up and preach a new crusade against all that is false, and to lead to victory over it. We need a great rekindling of dead bones. Looking across the horizon, dull clouds obscure the sun, and the prospect appears bleak and uninteresting. But, it will be said, buildings are rising daily pleasant to look upon, and the improvement in planning, variety of design, and absence of fussiness, is remarkable, and I admit it; but is not a great deal of this upon lines which spring from impure sources, and due as much to quaintness, piquancy of effect, and a large amount of conceit? Can we, from most that we see nowadays, conscientiously teach the principles of beauty, breadth, proportion, simplicity, and refinement? I think not. Is such work followed with a tithe of the enthusiasm and love with which Gothic was? Is it a style at which the student of to-day can start on his career, feeling that he has found the truth, and, girding up his loins, through good and evil report follow in its path? I do not think so; and in the present unsettled state of our art I trace the coldness which has fallen upon the members of this society of late years, paralysing what should be the highest aim of its existence—nobility of design. I take it another cause may be a too great tendency to thoughtless study of ancient work. I mean by that that students think the one great aim is to fill their books with pretty sketches, jotted down because they took the fancy of the moment. This is very much like dipping into a book and indulging in desultory reading; picking out the light and amusing parts, but missing the author's teaching; skipping the chapters which imparted the great lessons the author had to teach. Depend upon it, if you want the secret of success, which has produced the works of great architects, you must seek it in a different fashion to the one too usually adopted.

Mr. J. D. Sedding, discoursing "about modern design," expressed his opinion that he thought it a mistake to begin to design too early. I will not open that question for discussion here now; but I would say this. I believe it would be far healthier and better if you would confine your experiments to the subjects given in the classes, where you will have the benefit of criticism from your fellows, and not seek outlets in other channels, where you will miss the advantages of having your faults pointed out, and learning what others think of your design and method of treating it.

How can enthusiasm be once more kindled in this association? I hardly know. What would be the best course to adopt in teaching design? To this I would venture to say, let us in our classes commence with teaching those styles of architecture which, by a general consensus of authoritative teaching, are recognised as the *Classics* of art, and, taking one of these styles in a session, let the student devote his whole energies to obtaining something more than a smattering of it. Looking at the syllabus for 1883-84 of the elementary class of design, is it not rather appalling? Designs in eight styles, to be worked out in so many months! Is this the best system we can adopt? Would it not be wiser to take one of them, and learn its grammar with a little more thoroughness? I only express this as an individual opinion, which, however, forces itself the more I have thought over the subject. I think it is one well worthy of the most careful consideration. Work, to be of any real service, should be "thorough"; under our present system it cannot be. Then, if it is a wrong system, let us set to work and reconsider the whole basis upon which instruction in the art of design should rest. Any real acquaintance, except in one or two cases, of a consistent and intelligent knowledge of style has been more noticeable by its absence in the designs which have of late been submitted in competition. There must be some cause for this.

We must not sit with our hands in our pockets waiting for the next great tidal wave of fashion, but in the meanwhile devote our energies to the study of all that is best in art, be it Classic or Gothic; so that, being well grounded in the grammar of architecture, we may at least compose in language which shall be intelligible and appeal to cultivated minds.

I must now refer to one feature especially noted in this year's



report. I mean the colour-decoration class. It could not present a much worse account than the last one. No good can result from shutting our eyes to facts; let us face this unpleasant one, and consider how we may remedy it. No one who aspires to excel in the profession of architecture can dispense with colour-decoration. The charm of a building is as much in its colour as in its form. Incongruity of colours, violent contrasts, and absence of effective contrasts may mar an otherwise fine design. An eye for colour, an ear for music, are gifts which can perhaps hardly be acquired; but unless the gift is cultivated you can with no certainty achieve success; whereas some measure of success can be achieved by the patient cultivation of any art where the will exists to master it, and so obvious blunders may be avoided. If colour, then, plays so important a part in architecture, no student can afford to neglect the study of it. The association has recognised this, and included a class for those who desire to learn something about it; the subjects generally given are for interior decorations, but the principles underlying that are capable of universal application, and I would strongly urge, in the words of the "Note," which tells you of the want of success which characterised last session in this branch of study, "that the prosperity of this useful class depends materially upon your individual support." It must have been a disappointment to the president and officers of the class last year to experience the failure that their efforts met with, and I can only express the wish and belief that, under the reformed regulations, a success may be recorded this session. I hope that those whose predilections are for colour will join the new class at once, and throw all their energies into it, persuading others to a like course. With the progress which is taking place in the decorative arts, it is of the highest importance to the student who aims at excellence that he should be acquainted with colour-decoration, and cultivate a knowledge which will enable him not only to build with materials which shall, by their happy contrast, add to the beauty of his design, but also be able to advise his client in the internal decoration of the building, instead of leaving it to the too often vulgar taste of the painter and decorator. The art is too little cultivated amongst us in the present day, and a source of legitimate income lost to a profession which should possess it by every right.

What is the future of architecture in this country? What is the future of the men who are crowding into the profession of it? Difficult questions to answer. But let us, at all events, try and read some of the signs of the times, and each one for himself endeavour to solve the problem of how to meet the difficulties which in the struggle for existence become greater to master year by year.

One thing is clear, if we will only look at it steadily, and that is that the architect of the future must be much better educated and trained for his duties than he is at present. We all know the strides which education has made of late years. Why, a lad now for a few shillings' payment gets a better teaching than many of us got a few years ago and our parents paid a high price for it. The words of the great poet ring now with greater truth than ever they did: "The age is grown so picked, that the toe of the peasant comes so near the heel of the courtier, he galls his knee." The whole scale of acquirements considered necessary for the fight of life has so risen that, to hold any position at all, a man must be above his fellows, above the average scale. Mr. Aston Webb, in his presidential address, foreshadowed the time when we should possess an institution for the proper and more systematic education of young men for the profession of architecture; and though that day is distant, I believe it will come, and if we had more *esprit de corps*, more unity, more belief in the greatness of our art, we could hasten that day, and not let the century close without leaving behind us a college devoted to the teaching of architecture. But you must not wait for that: take what you can get, and see that you make good use of it. You have the association: join the classes, and do so now, attend the lectures, take off your kid gloves and coats, and—work. Your client of the future will exact more: merely calling yourselves architects will not be enough, nor is it enough merely to study the art side of architecture on the comparatively easy method of pretty sketching. To many that is the most enticing, but it will only make you good draughtsmen and designers upon paper; work executed on such lines never can be really successful. Good architecture must be strong, and, as I ventured to say in another place, to be strong you must know how to make it so; hence the study of science is a necessity. And the student must not only indulge his fancy when studying examples of architecture; he must also take note of their construction, the purpose of the building, the motive of the designer, the materials, colour, and all else which has brought the work about. He must not be satisfied with perspective sketches; those are of course useful, but too often delusive and apt to spoil one for the less attractive but far more useful pursuit of measured drawings. Never mind about clean paper and pretty sketches to show to your friends, but bend your minds to a close study of parts on the principles I have suggested. They are not my own, but those of men who, by their work, have shown how true they are. A thorough acquaintance with mechanics is necessary, and in the reach of all, and if you will make them, opportunities for the study of works in progress are at hand. All of you have some leisure; you must make up your minds in these days to give up a great deal of that to your work. In this great city

building is constantly going on, and much may be learnt by spending odd quarters of an hour in watching the men at work, seeing the construction of the building as it goes on to completion. May be in your walk to the office you pass a work in progress; manage to spend a little time each day, and note down what you see and learn. I think it was Professor Roger Smith who suggested this course of study the session before last; it is well worth your attention. Try by all means in your power to see the works carried out that you have been engaged upon in the office, and endeavour to persuade your principals to forward your wishes in this direction whenever practicable. The many ways open for acquiring knowledge to young men resident in London are laid before you in the Brown Book. Blame no one if you neglect to use them. If any aim at following the profession in its highest branches, it behoves them not only to master the art and science of their profession, but to fit himself for the society of the men he must be thrown amongst. An architect in good practice will be called upon to mix with men of the highest refinement and culture, and to hold his own in society it is necessary that he be fitted for it. I note with satisfaction the entrance into the profession of more men from the universities. Such a training should give them an immense advantage in their intercourse with the world, and on social grounds also. The architect of the future will have to pursue the study of many things, which at the present time he has not devoted so much attention to as he ought. A thorough knowledge of the principles and practice of sanitary science is simply indispensable, unless you are disposed to see this work drift into the hands of the outside specialists, and be looked upon by your clients as simply designers, who cannot be trusted with matters affecting the health of the people you build for. Is it wise to let a class of work of such paramount importance as life-saving go out of your hands? Then a knowledge of iron construction, building in concrete, electricity, warming and ventilation, will become more and more essential. Engineers recognise this, and it seems to be looked upon as their peculiar province to deal with whatever modern science has added to our list of important building materials and appliances for modern building. So many architects, wedded to the old forms of construction, seem to think it derogatory to their art to expend any time or thought upon new materials, &c., and the science of using them; of course if we do not the engineers will, and so little by little the field of architecture will be invaded still more, and the reproach of not being practical and up to the requirements of modern times will not be unmerited. An intelligent study of the architecture of past times teaches how endless is the combination of materials, forms and modes of construction; the old builders appropriated always what came most readily to hand—follow on these lines, and you will no longer neglect to use those means which modern discovery has placed ready to our use. We must use them, however, intelligently, and not be ever striving, in our love for what is old, to try and make the new materials represent what is foreign to their nature. We must endeavour to get rid of this eternal plagiarism and imitation, which is the curse of so much modern design.

I have given a long list of requirements, but I challenge anyone who has given thought to the subject to say whether it is an exaggerated one. It certainly is enough to make the thinking student pause and ask himself whether, if to accomplish so much is necessary, he is strong enough for the fight. Look well to it now. Unless you are strong in your determination to do this, you had better give it up, or you must be content to count only among the rank and file; a leader you never can be. To be a leader will require all your best energies, unflagging zeal, and a natural bent for your profession, together with that indispensable accompaniment for a life of work and hardship, a strong constitution; and you must make up your mind to endure many hardships and disappointments. Better face this at the outset.

I cannot help thinking that the tendency of modern times will, as I endeavoured to show in a paper that I had the honour of reading here some time back, be to create a class of specialists in our profession, and in collaboration, the latter view the late Mr. Page held very strongly. Take sanitary science for example. We architects neglected it; a class of sanitary engineers arose, and have taken a great deal of such work out of our hands. Had we not better try and get it back again? An architect should be better able to do such work, in so far as it relates to architecture, than an engineer; and there is, as far as I can see, no reason why he should not. Here is an opening for special study and profitable practice. A man who has made a speciality of sanitary science, may collaborate with a brother professional who cannot, perhaps, give his attention and time to a subject demanding so much. Colour-decoration, again, demands special study, and an architect in large practice frequently finds that he cannot, if he would, give to it all that is demanded, and so the painter and decorator is called in, who, unskilled in architecture, applies his decoration on no defined principles, and too often spoils a fine work by unintelligent use of colour. Is there not a field here for the specialist to collaborate with his brother architect? Numerous other ways in which this principle could be brought to work will occur to you; time will only permit me to suggest them here.

When acting as president of the class of design, I was struck with much of the draughtsmanship which I saw. I can only use



one word to describe it—it was *slovenly*. There was too much attempt at picturesqueness, and that at the sacrifice of good line and accurate delineation. Designs for new buildings were drawn in the roughest manner, coloured like a sketch of an old building, and the lines of the roof, &c., positively drawn irregularly, so as to give the building the appearance of being old and weather-beaten. Surely this is an error. Would not such drawings puzzle the clerk of works or foreman when he reads in the specification, “No deviation of any kind is to be allowed from the drawings”?

Our roll call this session omits, among others, the names of two men who for so many years had their names upon it, familiar in our mouths as household words. I allude to Bowes A. Paice and Richard C. Page. Both of them served in the capacities of secretaries and vice-presidents of this society, the former as president; both men were deservedly popular, for they possessed those qualities in the offices they held which always command respect and affection. Many of us here knew them more or less; you who knew them well will bear me out when I say that they were courteous and honourable gentlemen, who discharged their various duties to the association with kindness, judgment, skill, tact, unceasing attention, and with no self-seeking interests. What such duties involved, in their claims upon time, I have lightly sketched. Mr. Paice, who is just dead, had for some few years past retired from any active work in the association, so that comparatively few of the present members knew him, except by name; his friends, however, will long cherish the bright cheerful smile and genial manner of old days.

Mr. Page's death touches us in one way more closely. Only last session he was one of our vice-presidents, and on one occasion occupied this chair. At the council-table we shall miss him, for his judgment was sound and his opinions expressed with characteristic decision and truthfulness, and we shall miss him at these fortnightly gatherings, for whenever able to attend he was pretty sure to come. I dwell more on this loss we have sustained by Page's death because I was the last of his professional friends who was with him before he was stricken down by the fever. We met at Wells, the same day that the Architectural Association excursion terminated. I noticed then that he was not so bright as usual, but it was not until the Tuesday following, at Barnstaple, that I saw he was really unwell, and then insisted upon his seeing a doctor. For the first few days no serious end was anticipated, but on the Saturday his symptoms decided the doctors on removing him to the Infirmary, where skilled nursing could be obtained. Duty compelled me to leave on the Monday, and I never saw him again. He was then only just conscious, for the fever had told upon his strength, and not long after, conquered him. While in the hospital he won the affection of those who nursed him, and all that care and skill could do were freely given. His sisters and personal friends were with him the last few days, and Mr. Robins, whose name is familiar to us, has left us an example. Mr. Page had for years assisted him in his work, and a strong mutual esteem existed between the two men, and Mr. Robins's respect and gratitude to his old assistant led him to play the brother's part, and leave no stone unturned to promote if possible his recovery, and to reward those who had ministered to his wants. At the conversazione were exhibited some of Mr. Page's “Pugin” drawings and architectural designs; by the courtesy of the editor of *The Architect* some of the latter will be shortly illustrated, and a committee has been formed for publishing a series of the Pugin sketches, as a memorial to him, particulars of which will shortly be before you. I hope you will give your support to the project, and subscribe liberally to the memorial.

Mr. Page was not, as outsiders would view it, a successful architect. He was an excellent draughtsman, well versed in the Gothic style, which he had the advantage of studying in Mr. Street's office, and he was a quick and elegant designer in that style. Eventually, had he been spared, I believe he would have come to the front, but, like so many, he had to fight his way alone, without influential friends, and about his only chance apparently lay in competitions. And here again he fell short of his aims, and much because of his integrity and truthfulness, which would not allow him to design a building which might be more attractive, but which would be contrary to the advertised requirements. Be that as it may, though he won honourable distinction, he never succeeded in taking a first prize. I fear he was a disappointed man. He saw men a long way his inferiors enjoying a good practice, and himself behind in the race; but he kept a good heart to the last, and only to his personal friends would express now and again the bitterness his want of success caused him. His story is like that of many, and has its teaching for all. Loving his art and believing in it, true to himself and to all men, he passed away, leaving behind him a name which will, I trust, be respected and kept green amongst us; more, perhaps, than if he had been only self-seeking, caring only for what money he might make, no matter how or from what source.

I am tempted by recent remarks in the press, and circumstances which have come under my own notice, to refer to an ugly charge frequently made against us, and broadcast; one which makes the hot blood tingle in the veins of honest men. I mean that of taking commissions from others than the client. It is said that the custom prevails largely amongst architects. I do not

believe it. That it does exist to some extent is, I fear, too true. The temptation is a strong one, and so insidious that no great surprise need be felt that some men give way to it, and thereby swell their incomes. We have in our ranks young men in their articles, others acting as assistants, and some who are starting in practice, and I would fain, for their sake, raise a warning voice against this cancer, which, when once it has fastened on the system, grows and sends its poisonous fangs in all directions until all that is best and noblest in a man's nature gives way to it. Most of us who have had any experience of a professional life know that some tradesmen, in their desire to secure custom, offer the most advantageous terms to architects as a bait. It must only be met in one way, and that is absolutely to decline receiving payment in any form whatever except from your employer. Once pocket the bribe and you lose self-respect; you have accepted hush money, and you become the servant of the briber. In electing to follow the profession of architecture you have chosen one which, with fair success and hard work, will give you a moderate income—very rarely a large one—but do not seek to swell it by illicit gains. You belong to the oldest and noblest of the arts, for she is the mother of them all; then, as true sons, refuse to bring discredit on her. Should you, as I hope you will, join the ranks of the Royal Institute of British Architects, you will undertake not to accept payment from anyone but your clients; to do otherwise would lay you open to discovery to expulsion from that society with a lost reputation, besides giving the enemy occasion to blast the good name of the profession you have adopted. If this evil does exist to any extent among architects—and I repeat I believe it is a libellous and untruthful statement—any words of warning that I may raise may not be without value to those who will be sure to have the temptation, sooner or later, thrust upon them.

I hope I have not wearied you with this rather long address, but I may never again have the opportunity of saying my say; and in placing me in the position which I have the great honour to hold—and I do consider it an honour—I claim to have some right to speak openly and plainly. I believe so thoroughly in the great work that the Architectural Association has in its power to do, that I would fain try to help it on. If what I have said contains some truth in it, weigh it well; do not accept any advice I have given without testing it; if it appeals to you as just and good, endeavour to follow it; a great future is before you, and if you mean to succeed you must be up and doing. Remember that the success of the Architectural Association and the responsibilities of it depend upon every individual member, as well as upon those whom you have elected to serve you. Show your sympathy and interest in the work by crowding into and keeping up your attendances at the classes and lectures; support with loyalty and enthusiasm your teachers, and do not sit tongue-tied at these meetings, but speak out your thoughts. If you have anything to say, do not hesitate to speak; do not always leave it to the front benches; be sure of this, that we seniors are always glad to welcome a new speaker. You have, as members of this body, advantages far greater than our predecessors had; you belong to a profession which, rightly followed, will kindle the highest and purest enthusiasm if you possess the capacity to receive it, and are gifted with the ability necessary for success. If you are, you may leave behind you names written in stone.

And now, with a few words personal to myself, I will conclude. I feel, in the advice I have ventured to give, how comparatively easy it is to say, Do this. How very difficult to perform it! I do not, believe me, for one minute point to success in my own person; but I have rather spoken as I have done, hoping to see you successful, and the Architectural Association accomplishing its mission to the full. A sign-post, where many roads meet, is a most useful director, though it cannot move one step of the many ways to which it points the traveller; but the sign-post has its value, and I hope my discourse of to-night may have served the humble purpose of starting you in the right direction, though I may not travel it with you.

Mr. J. D. MATHEWS proposed a vote of thanks to the president for his address, and said he trusted the members would show their appreciation of it by taking advantage of the opportunities offered in the Association to the utmost of their power. Mr. Mathews then spoke in kindly terms of the valued friends whose loss the Association now deplored. Both Mr. Paice and Mr. Page were well known to him personally. Those present were probably better acquainted with Mr. Page. That gentleman had been working with them so recently that it was hard to realise that he was gone from them for ever. Mr. Mathews also alluded to the amount of work Mr. Page had done for the Association, and said that no one who had not experience of it could tell the amount of work done by the hon. secretaries—it really was enormous; but he hoped there would be no change made in the work of the Association being carried out, as hitherto, on the honorary principle. It had always been a distinguishing mark of the Association that members were always forthcoming who were willing to give their time and labour to the Association, and it was a matter of pride amongst them to perform the work gratuitously. Mr. Mathews said he thoroughly agreed with the sentiments expressed by the president on the subject of specialists in the profession, and it seemed to him desirable that there should be specialist architects in the present



times. Architects had not, he said, half the opportunities that other professions enjoyed. Some men were, it was well known, better on some one thing than another, and he did not see why they should not be consulted. It would be of advantage to the clients, and assist them in their own profession.

Mr. E. J. TARVER seconded the vote of thanks, and said he must be allowed to add his testimony to what had been previously said in memory of the friends the Association had so lately lost. He then said that he did not share in the hopeless view taken by the president of modern architecture. On the contrary, he would venture on the proposition that much of the domestic architecture of the time was essentially modern, and that we only awaited a similar development of ecclesiastical architecture to possess an emphatically English nineteenth-century style. Church restoration had probably been a bar to our advance in ecclesiastical architecture, for architects had not had the courage to make their work as different from old styles as these old styles were one from another. Old work must be studied, not as a basis for practice, but in order to get behind the style and see the reason for this or that particular feature. Restoration for its own sake was, he considered, a mistake, as, for instance, the proposal to pull down the store-house at the Tower of London in order to replace it by a copy of an ancient building. The result of this system of restoration was that the Society for the Protection of Ancient Buildings bid us prop up rather than rebuild, and recommended props of the plainest character; whereas we found from straining arches and flying buttresses how beautifully props might be treated. In conclusion, Mr. Tarver said several eminent church architects were now practising in a more modern fashion, the "They-all-do-it Style," as might be seen in the Church for the Blind in Oxford Street, stables in Down Street, Park Lane, and an elaborate house at Sydenham. Twenty years ago the cry among such men was one style for all buildings. Gothic was right for churches, and therefore for houses. We merely wanted these gentlemen to be consistent, and show us that what was right for houses was therefore right for churches, and then all would be modern.

Mr. BLAGROVE, Mr. STANNUS, Mr. ASTON WEBB, and Mr. W. H. ATKIN BERRY supported the motion, which was put to the meeting by Mr. Mathews, and carried by acclamation.

The PRESIDENT responded briefly, and the proceedings terminated.

### "TRUTH" AND ILLICIT COMMISSIONS.

THE following correspondence appears in *Truth* this week, and has reference to certain remarks recently made by the editor of that journal concerning architects and commissions:—

Royal Institute of British Architects,  
9 Conduit Street, Hanover Square, London, W.  
November 6, 1883.

Sir,—The attention of the council of the Royal Institute of British Architects has been called to a paragraph in *Truth*, of the 18th ult., in which you inform your readers that "almost invariably the architect is paid a second commission by those whom he employs;" that he does not consider such a course of procedure to be a fraud; and that "whenever an architect particularly recommends mantelpieces, or grates, or any other such articles, which are made by some particular firm, it is about fifty to one in favour of his having a personal reason for the suggestion."

We are directed by the council to state, in the most unqualified manner, that the accusations thus brought against architects are, as far as they regard the members of this institute, calumnious and untrue.

On the assumption, however, that, before venturing to make accusations so sweeping, and so damaging to an honourable profession, as those to which we refer, you were in possession of facts injuriously affecting individual architects, we are directed to invite you to communicate to the council their names and addresses, in order that some action may be taken thereon. Every fellow and associate of the Royal Institute of British Architects is bound by a written obligation *not* to receive or accept any pecuniary consideration or emolument from any builder or other tradesman whose works he may be engaged to superintend, and *not* to have any interest or participation in any trade contract or materials supplied at any works the execution of which he may be engaged to superintend. The proved infraction of these fundamental rules involves immediate expulsion from the institute.

We beg leave to enclose for your information a list of our members, and we are to request that you will accord to this letter publicity equal to that given to the serious accusations it refutes.

We remain, sir, your obedient servants,

J. MACVICAR ANDERSON, Hon. Secretary.  
WILLIAM H. WHITE, Secretary.

Sir,—I am in receipt of your letter, in which you refer to certain paragraphs which have appeared in *Truth* respecting architects, and in which it is alleged that many are in the habit of receiving a second commission from those whom they employ, in addition to that paid to them openly as architects, and you ask me

to communicate to your council the names and addresses of any architects who are members of your institute, and who have received such commissions.

It must be obvious to you that if the allegations be correct, it is impossible for me to accede to your request, for the tradesmen who give the commissions would not wish in their own interests to have their names made public.

I shall, however, have much pleasure in publishing your letter, which you say is a refutation of my statement, so far as the members of your institute are concerned. But in doing so, I shall also publish my reply.

As I understand the position of an architect, it is this: He is employed by an individual who is about to build a house: He receives a commission of 5 per cent. on expenditure. In return, he is expected to make plans, to see that the work be well and efficiently performed, and to protect his employer against all undue charges.

Is it not the "custom of the trade" for articles required in the building and decorating of houses to be subjected to most extraordinary discounts? Take, for instance, ornamental tiles, now so popular. They are bought by the builder subject to a discount varying from 10 to 20 per cent. Grates and mantelpieces are subject to a discount of 20 to 33½ per cent. Wall papers are subject to a discount of 50 per cent. Many other articles, which it is needless to enumerate, are subject to like discounts.

This being unquestionably the fact, I would venture to ask 1. Why this extraordinary "trade custom" prevails? 2. Whether the members of your institute are in blissful ignorance of it? 3. Whether they, or some of them, do not certify to the correctness of a builder's account when it contains items on which these discounts are allowed without their being deducted? 4. Whether architects do not invariably insert the names of houses where these discounts are allowed in their specifications, and insist upon the builders dealing with these houses, and whether in these cases the builder does not receive from such houses a smaller discount?

Let us assume, for the sake of argument, that the architect in no case receives any portion of these discounts directly from the houses which are in the habit of giving them. By the rules of your institute he is permitted to receive 5 per cent. on expenditure. If the builder is allowed to receive 50 per cent. on wall paper, besides a cash discount, it is evident that the architect receives a commission on this 50 per cent. You can hardly imagine that an employer has the remotest idea when he chooses a wall-paper—say at 12s. a piece—that the cost to the builder is 6s. a piece, less cash discount, or that the architect who is employed to protect him is certifying to the 12s., and receiving a commission not only upon the real price, but upon the artificial price.

So long as the trade custom prevails, so long as architects insert in their specifications the names of particular houses, instead of allowing builders to deal in the open market, I, for one, shall continue to believe that many architects take more care of themselves and of their friends than of their employers. The subject is one of considerable interest, and if you like to furnish me with any explanation of the points to which I have alluded, I shall be quite ready to give publicity to it. I do not question the desire of your council to protect the public. What I deny is, that they succeed in doing so.

Yours obediently,

THE EDITOR OF "TRUTH."

### ENGINEERING PROGRESS.

AT the opening meeting for the session of the Institution of Civil Engineers of Ireland, an address was delivered by Mr. Wm. H. Mills, president, in the course of which he said, there are so many large and important works recently finished, as well as others now in course of construction or approaching completion, that it would be next to impossible to follow up the history and particulars of each. In the Forth Viaduct, East River Bridge, New York, and Kinzua Viaduct on the Erie Railway, we have three enormous works, each one of a totally different character. The Forth Viaduct presents us with a striking departure from the previous recognised arrangement for long-span bridges. The hitherto unattempted great span of 1,700 feet has led to the adoption of the system of cantilevers and central girder, and in the working out and completion of this great work we shall obtain valuable practical information of a system of which our experience has hitherto been limited to theory or experiment. Steel will play an important part in the construction, as the use of this material, with its increased strength per square inch as compared with wrought iron, will result in the saving of a large amount of dead weight. In point of magnitude this viaduct will be unrivalled. Its length will be over a mile, divided into two spans of 1,700 feet, two of 675 feet, fourteen of 168 feet, and six of 50 feet. The East River Bridge, to connect New York and Brooklyn, is an example of the suspension principle on its grandest scale. The total length of the bridge is 5,989 feet, of which the length of the main span is 1,595 feet 6 inches, and of each of the side or land spans 930 feet. The height from lower floorway of centre of main span to water



level is 135 feet 6 inches, and from roadway at piers to water level 119 feet. Height of arch of towers of piers above roadway 117 feet, and total height of towers above roadway 159 feet. The size of the towers at high water level is 140 feet by 59 feet, and at the top of roadway level 136 feet by 53 feet. The width of opening through the towers is 33 feet 9 inches. The full width of the floorway is 85 feet, carried by four steel wire cables, each 15 $\frac{3}{4}$  inches diameter. These cables are so arranged as to provide for a raised platform or promenade, about 15 feet wide, for pedestrians along the centre of the bridge. On each side of this promenade there is a line of rails for railway carriages and waggons, and outside of these are the roadways 18 feet 6 inches wide, one on each side of the bridge—to carry the ordinary carriage, cart, and tramway traffic. Each cable is 3,578 feet long, and contains 5,434 wires. The Kinzua Viaduct, on a branch of the Erie Railway, in the State of Pennsylvania, is remarkable for its great height and the lightness and peculiar arrangement of the iron piers or towers. Situated at a high level, on a spur of the Alleghany Mountains, the roadway of the viaduct is 2,065 feet above sea level. It may be interesting to note that this spur forms part of a water shed whose waters flow north into the Gulf of St. Lawrence, east into Chesapeake Bay, and south into the Gulf of Mexico. Designed to save about eight miles of a detour, and to avoid long lengths of heavy gradients, this viaduct has been completed in a very short time, and at a very moderate cost. The total length is 2,051 feet, the greatest height 301 feet from rail level to bed of stream. It consists of twenty-one spans of 61 feet, carried on abutments of masonry and intermediate piers of light ironwork. The proportion of span to height differs so much in this viaduct to what has hitherto been adopted in several works of a similar nature as to form a study for engineers. The Giant's Causeway, Portrush and Bush Valley Tramway, six miles in length, recently constructed in the north of Ireland, to be worked by electricity, affords a striking example of how the natural resources of a locality may be made available for generating the motive power. The promoters of this line have erected powerful turbines near the large fall in the river about a mile above Bushmills, and by thus utilising the passing or waste water to drive the dynamo machinery, are enabled to obtain their electrical power at the lowest possible cost. Several special difficulties were encountered in the making and equipment of this line, and its working will be watched with interest by all engineers. Although so wonderful and almost magical in its effect, the working of the telephone is so simple, and possesses such advantages for business purposes, as to have led to its adoption as a distinct branch of telegraphy. Especially have its benefits been felt in the far East—in countries such as China and Japan—where our ordinary complete letter-code systems were utterly unable to represent the strange consonants and sounds which form the alphabets of those distant lands. Whatever may be the views and experience obtained as to the comparative cost and utility of the electric light, there is but one universal opinion as to the beauty and brilliancy of the light itself. Far more powerful than any other known means of illumination, electricity undoubtedly stands in the first rank for lighthouses, or for important works of construction which must be carried on during the night, or for other purposes requiring an intense, penetrating light. For such duty the question of cost may be a matter of secondary consideration, the chief object being to obtain the most powerful light which can be procured. During the past year—1882—which was one of remarkable activity in railway construction, 10,918 miles were constructed in the United States, and that country has now 1 mile of line to every 500 inhabitants. This shows a striking proportion to even the richest of European nations, where Great Britain has for every mile of line 1,939 inhabitants; France, 2,170; Germany, 2,154; Belgium, 2,203; Austria, 3,200; and Russia, 5,576. The use of steel rails has resulted in greatly increased durability of our permanent way, and the moderate price at which they can now be manufactured has put iron rails comparatively out of the market. It is satisfactory to know that this branch of our national industry is largely on the increase. In 1882 the total manufacture of steel rails in the United Kingdom was 1,293,785 tons, which was an increase of 212,045 tons on the production of 1881. Of this amount by far the larger proportion, or 733,919 tons, was for export, the remainder, or 559,866 tons, being for home consumption. The supply of sleepers must, sooner or later, become a very important question for consideration on our railways. There is no doubt creosoting and other wood-preserving processes have done much to prolong the life of sleepers, but the rapidly increasing extent of mileage throughout the world, together with the enormous number of sleepers now required annually for renewals, must before very long severely tax the present powers of supply. In the great timber producing territories the axe is often heard, but the planter is rarely seen; vast forests are cleared away, and their sites transformed into busy towns and manufacturing districts, these new places in their turn creating a demand for timber which their own districts can no longer supply. Unless some great change take place, and planting be carried out on a grand scale, we must look to some material for this important item of our permanent way. Appearances would indicate that at no very distant date we shall have to rely on iron or steel for our

future sleepers. Ingenious minds have already been at work devising different forms in cast and wrought iron, and several descriptions have been tried with various degrees of success. In dealing with a hard, unyielding material like iron it is difficult to produce the soft, elastic, vibration stopping effect of timber, and most of the proposed systems of iron sleepers have failed to become popular on account of the noise and vibration when trains pass over them. Another objection to many of the schemes has been the great multiplicity of parts, and the constant and severe strain produced on the fastenings by the passing of every wheel. The bolts may be made tight at first, but the incessant shaking works them loose, the threads become stripped, and the rails cease to be held securely in position. To be of any use for heavy and fast traffic iron sleepers must be simple in construction and of few parts, and the fastenings must be of such form as to be the least affected by the continual jarring of a passing train. Tramways, the latest offspring of the railway system, are now so thoroughly appreciated, that their introduction is becoming every year more and more extended; and whether in the accommodation of a large passenger traffic in the immediate suburbs of busy cities and towns, or in mixed passenger and goods traffic in very thinly populated districts, there is no doubt that, in many cases, tramways supply special conveniences and facilities, which the ordinary type of railway cannot always be expected to confer.

### OLD EDINBURGH.

ONE of the wooden-fronted houses in the Lawn Market, Edinburgh, is being taken down, and a correspondent of the *Scotsman* says that it affords evidence of the correctness of Dr. Robert Chambers' theory that the wooden fronts were not an afterthought, but formed part of the original plan. A popular tradition is that, to clear the Borough Muir of wood, the citizens were allowed timber free to form *elks* to their houses, and hence the wooden fronts. Dr. Chambers, after careful examination, pointed out that this was not so, but that the fronts were originally open verandahs (one for each flat), and that they were, in more recent times, plastered up. Confirmation of this is seen at the present stage of demolition, for, now that the lathing is removed, the original front railings may be observed.

Messrs. Kinnear & Peddie, architects, say that they cannot agree that what can now be seen of the wooden construction corroborates Dr. Chambers' theory that the fronts of these houses were open verandahs. In the first place, the timber framework as it is now seen differs widely from that of the original structure, and to draw inferences from its present appearance would scarcely be safe. As a matter of fact, however, there is strong internal evidence to show that this building at least had, in all probability, not a verandah. It has been said that the railing of the verandah is now visible, but Messrs. Kinnear & Peddie are inclined to think that what he supposes to be the railing is only a portion of the vertical weather boarding with which the whole front was covered. They have, however, no hesitation in saying that the wooden structure is not an addition, but an integral part of the original building.

Messrs. Kinnear & Peddie are preparing minute drawings of all the details of the structure, and when they have recorded all the facts regarding its construction which the opportunity of the demolition affords, a paper on the subject will be communicated to the Royal Society of Antiquaries.

### THE WEDGWOOD INSTITUTE.

THE following valuable books have been presented to the Wedgwood Institute by the Mayor of Burslem, in commemoration of his mayoralty: Gruner's specimens of ornaments selected from Raphael, &c., 80 plates, atlas folio, the greater part in gold and colours, mounted on cloth and enclosed in portfolio case, bound in half Russia, with cloth sides and flaps, also explanatory note-book; Audsley's "Ornamental Arts of Japan," 2 vols., folio, 90 plates, 74 being in colours and gold; Shaw's "Illuminated Ornaments of the Middle Ages," with 59 plates in gold and colours, folio, half calf, 1883; Flaxman's classical compositions, illustrating Homer's Iliad and Odyssey, Æschylus and Hesiod, 146 outline plates, by Piroli, Moses, and Blake, 4 vols., oblong, folio, boards, 1805 to 1831; Wyatt's "Industrial Arts of the 19th Century," 158 plates, printed in colours and gold, royal folio, half morocco, 1851; Wyatt's "Ornamental Metal Work," 50 plates, in colours and gold, royal folio, half morocco, 1852; Stuart and Revitt's "Antiquities of Athens," with nearly 250 plates, 3 vols., atlas folio, half calf, 1762 to 1794; Moses's collection of antique vases, 170 plates, quarto, half morocco, 1811; Harding's "Elementary Art," 28 plates, cloth, imperial quarto; Harding's "Lessons on Art," imperial quarto; Harding's "Guide and Companion to the Lessons on Art," octavo, cloth; Hulme's "Suggestions in Floral Design," 52 coloured plates, folio, cloth;



Hulme's "Plants: their natural growth and ornamental treatment," 44 plates in gold and colours, folio, cloth; Hope's "Costumes of the Ancients," 321 plates, 2 vols., cloth, 1841; Flaxman's "Acts of Mercy," 8 compositions in the manner of ancient sculpture, oblong, folio, half bound; Cundall's "Examples of Ornament in every style," folio, with plates; Shaw's "Handbook of the Art of Illumination," with illustrations in colours and gold; Harding's "Lessons on Trees," four parts, in folio; and Waring's "Art Treasures of the United Kingdom," 100 plates, mostly in gold and colours, folio, full morocco, gilt and tooled.

## BRADFORD SOCIETY OF ARCHITECTS.

AN exhibition of architectural drawings has been held in the Art Gallery of the Bradford Free Library. The drawings were furnished by arted pupils in the offices of the surveyors and architects of the town. Some months ago the council of the Bradford Society of Architects and Surveyors, with a view to promote increased study and interest in their profession on the part of the pupils, invited a competition, by offering prizes and certificates of success to the authors of the best drawings of certain specified subjects. In response to their invitation thirteen sets of designs have been received, numbering altogether about fifty drawings, and, after careful consideration, the prizes have been awarded as follows: Architectural subjects—First prize, Mr. A. A. France, pupil with Messrs. Milnes & France; second prize, Mr. Louis Ambler, pupil with Messrs. W. & R. Mawson; third prize, Mr. W. Broderick Clarkson, pupil with Messrs. T. H. & F. Healey. Surveying subjects—First prize, Mr. Thomas H. Smith, pupil with Messrs. Smith, Gotthardt & Co.; second prize, Mr. W. H. S. Dawson, pupil with Mr. Joseph Cowgill. The drawings are necessarily of a somewhat technical character, but the subject that best lends itself to picturesque treatment (a bit from Kirkstall Abbey) has been rendered, in several instances, in a highly artistic manner. Bearing in mind the fact that all the competitors are under twenty-two years of age, the drawings may be regarded as very satisfactory and as evincing much promise of future distinction; and the society is to be congratulated on the success of its laudable attempt to promote a healthy rivalry among the junior members of the two professions.

On the 8th inst. a meeting of the society was held, when the competitors, together with Mr. W. T. McGowen (town clerk) and Mr. J. H. Cox (borough surveyor), were invited to meet the members at the Alexandra Hotel. Mr. C. H. Hargreaves, the secretary, read the report and award of the judges, and each of the successful competitors received from the president (Mr. T. H. Healey) a certificate and cheque for the amount of his prize. Mr. McGowen delivered an interesting address to the students, and other gentlemen having proposed votes of thanks to the president and judges, the remainder of the evening was spent in a social manner.



### Plain Speaking.

SIR,—Straightforward "plain speakers" will agree that no man can fairly lay claim to that title who is afraid or ashamed to complete the outspoken character of his utterances by giving his name.

An anonymous letter-writer, like a cur barking behind the railings, secures his safety at the expense of placing himself altogether beneath serious notice.

Faithfully yours,

ARTHUR W. BLOMFIELD.

6 Montagu Place, Montagu Square,  
London, W.: Nov. 14, 1883.

### Historical Chairs.

SIR,—Will you kindly enable me to ask, through the columns of your journal, for descriptive particulars, with engravings, drawings, or photographs of celebrated chairs in family residences of the nobility and gentry; with information, also, of notable chairs in cathedrals, churches, colleges, clubs, town-halls, and public institutions at home and abroad. I am preparing a collected account of historical chairs from available literary sources, but knowing that there are many interesting ones which have escaped my search, as well as some others in private possession but little known, and wishing to make the proposed illustrated work as copious as possible, I thus beg your assistance.

Yours obediently,

C. B. STRUTT.

34 East Street, Red Lion Square, W.C.

### Page Memorial.

SIR,—May I ask you to be so kind as to find room for the enclosed circular, which is about to be sent to members of the Architectural Association and others? The committee will esteem it a favour.

Yours, &c.

ARTHUR E. NORTHCOTE.

Hon. Secretary.

Nov. 14, 1883.

120 Belgrave Road, S.W., November 1883.

DEAR SIR,—A committee has been formed, of which the president of the Architectural Association is chairman, to raise a fund for a memorial to the late Richard C. Page, who for so many years was an active and energetic member of the Architectural Association, and for four years one of the hon. secretaries, and last session a vice-president. The committee desires to give all those who knew and respected him an opportunity of subscribing to it. It is proposed to publish twenty-five photo-lithograph copies of his Pugin drawings, the originals of which were exhibited at the last conversation. They will be printed on stout paper, interleaved, with a photograph portrait of Mr. Page, preface, index, and list of original subscribers; the book will be handsomely bound in cloth, with gilt lettering and edges.

Subscribers of 12s. 6d. and upwards will receive gratis a copy of this memorial work; and the surplus funds, after defraying expenses of publication, advertising, postage, &c., will be devoted to raising a permanent memorial, the nature of which must depend upon the amount collected.

If I may add your name to the list of subscribers, perhaps you will be good enough to fill in the form attached, and return it to me at your earliest convenience.

I am, dear sir, yours very truly,

ARTHUR NORTHCOTE, Hon. Sec.

## CHURCH BUILDING AND RESTORATION.

**Atherington.**—The church of St. Mary, Atherington, North Devon, has been reopened after restoration. A fragment of a rood-screen delicately carved, and an unusually fine specimen of the Devonshire screen encloses the north chancel or Umberleigh aisle. There is also an interesting old carved chancel screen. The work has been carried out by Mr. Dart, builder, of Crediton, from the designs of Mr. J. L. Pearson, R.A.

**Pangbourne.**—The new church of St. John the Baptist, at Whitchurch, has been opened. The building has been erected from the designs of Mr. Francis Bacon, architect, of Parkhurst, near Newbury, in Early English style. The walls are principally of flint, with facings of the same material, weather-stained as picked from the fields. The dressings are of Bath stone, and the linings internally of red brick, banded with basket colour, no plaster being used except between the roof timbers. The roof covering is of tile. The builders were Messrs. Wheeler Bros., of Reading.

**Shipton.**—The old church at Shipton Thorpe, near Market Weighton, has been restored and reopened. The work has been carried out by Messrs. Morgan, contractors, under the direction of Mr. Demaine, architect, York. During the work a number of antique carved heads and other remains of early work were discovered, and have been as far as possible replaced. An interesting Norman porch was also brought to light, and it has been re-inserted in the new entrance.

**Stourport.**—A Baptist chapel has been opened. The building has been erected by Mr. Smallwood, builder, of Henley-in-Arden, Messrs. Ingall & Hughes, of Birmingham, being the architects. The cost has been about 1,350*l*.

**Ramsgate.**—Plans for sundry alterations to the parish church have been prepared by Mr. William White, F.S.A., who has also submitted a report on the state of the lantern tower, the window mouldings, &c., and on the expenditure required for the repairs.

**Widnes.**—The memorial-stone of the new church of St. Paul has been laid. The building is cruciform in shape, and in the Early English style of architecture. The church is to accommodate about 750 people. Mr. Shelmerdine, of Dale Street, Liverpool, is the architect.

## NEW BUILDINGS.

**Warrington Art School.**—This building was opened on the 8th inst. The site is close to the Art Gallery and Museum. The accommodation on the ground-floor is the attendant's house, with bedroom, living-room, and scullery; committee-room and library, attendant's rooms, entrance hall, 32 feet by 15 feet; modelling room, 24 feet by 16 feet; class-room, 24 feet by 16 feet; elementary room, 32 feet by 24 feet; and cloak-rooms, lavatories, &c., for the male students. On the half landing of stair is the entrance to the cloak-room and lavatories for the female students. On the first floor there is a painting room, 32 feet by 24 feet, and a gallery for drawing from the antique, 32 feet by 24 feet, both of



which are lighted from the north, and have also shuttered windows in the south for occasional use. On this floor is the private room of the art master, 15 feet by 14 feet; and in the basement are the cellars for the heating apparatus and for spare packing-cases. The building is heated throughout with hot water. The architect from whose plans the building has been carried out is Mr. William Owen, A.R.I.B.A. The cost will be about 4,000*l.*, exclusive of site.

**South Shields.**—The new county court offices at South Shields were recently opened, and have been erected in Queen Street, at the rear of the site in King Street intended to be occupied by the new premises for the National Provincial Bank of England Company, and offices for Messrs. Mabane & Graham, solicitors, the owners. The large county court office has a frontage of 24 feet, and is entered through a glazed lobby; measures 24 feet by 22 feet, and is 18 feet high. Directly communicating is the private office for the use of the registrar and treasurer; also a private passage, which will give access to the offices in King Street when completed. The building is faced with red pressed bricks, with stone freely used as dressings, and is designed in the Queen Anne style. The works have been carried out by Mr. Alexander Thompson, contractor, Gateshead, under the supervision of Mr. Henry Grieves, the architect.

**Congregational Hall, Hornsey.**—This building was lately opened. The hall accommodates 350 adults, and, as it has seven class-rooms communicating with it, there are seats for 450. In addition, the infant room has seats for 150, and the mothers' meeting-room for 100. The exterior is of red brick, and the interior has been made of pleasing appearance. The builders were Messrs. Mattock Brothers, and the architects Messrs. Lander & Bedells, of 6 John Street, Bedford Row.

## SCHOOL BUILDINGS.

**Elton, Bury.**—An infant school and class-rooms, to accommodate over 400 scholars, are about to be built in connection with the day and Sunday-schools of the Methodist Free Church. The plans have been prepared by Messrs. Maxwell, Tuke & Hurst, architects, Southport, and the works will be carried out under their supervision.

**Southport.**—Extensive alterations and additions have just been completed in connection with the Wesleyan school-chapel, Southbank Road. The additions comprise two large band-rooms, two class-rooms, an infant school, library, tea-room, corridors, &c. The architects are Messrs. Maxwell, Tuke & Hurst, of Southport, and the works have been carried out in a satisfactory manner by Messrs. Whitehead & Foster, builders, Southport.

## LEGAL.

### Court of Common Pleas, Dublin.

CALLAN *v.* SEGRAVE.

A BUILDER'S CLAIM.

This was an action on foot of a builder's contract to recover a sum of 4,200*l.*, claim for work and labour done, materials supplied by the plaintiff as contractor and builder, and for trespass and trover, conversion of the plaintiff's goods, and for alleged breach of contract. The plaintiff, who is a builder in Dublin, entered into a contract with the defendant, a parish priest, to build a church at Termonfeckin, county Louth, for 3,000*l.* According to plaintiff's statement he erected the greater portion of the edifice in strict accordance with the plans and specifications, and received 2,100*l.* in part payment. When the chancel was erected, with two side chapels and the sacristy, he required a certificate from the architect, Mr. Hague, to enable him to receive a further instalment, but was refused. He alleged that the defendant fraudulently induced Mr. Hague to refuse the certificate on the ground that the work had been executed in an unskilful and unworkmanlike manner. The plaintiff swore that this was not true, and that he had carried out the work strictly according to contract. The defendant, after the certificate was refused, took possession of the works, scaffolding, materials, &c., and, as the plaintiff alleged, illegally detained them. The defence was that the material used was bad, that the work was unskilfully performed and not in accordance with the contract, and that the plaintiff misconducted himself and used not to be in a condition properly to superintend the erection of the building. Defendant further alleged that under the terms of the contract he was at liberty to take possession of the premises and plant when the plaintiff failed to fulfil his contract.

The hearing of the case occupied a couple of days, and the Lord Chief Justice directed a verdict for the defendant.

## GENERAL.

**Mr. Charles Waldstein, M.A.**, has been appointed Director of the Fitzwilliam Museum, Cambridge, in the place of Professor Colvin, resigned. The value of the appointment is 300*l.* a year. Mr. Waldstein is Reader in Classical Archæology.

**Mr. John Rhind**, architect, has been elected Dean of Guild for Inverness, in succession to Mr. A. Mackenzie.

**The Glasgow Art Club** has elected the following new members: Mr. Francis Powell, president of the Scottish Society of Water-Colour Painters; Mr. James G. Laing, and Mr. James M. Nairn. Sir Frederick Leighton and Sir Fettes Douglas, who recently accepted the hon. membership of this club, have intimated their intention to contribute to the forthcoming annual exhibition of paintings.

**Mr. T. Stopher**, architect, has been elected mayor of Winchester, the coming year being the seven hundredth anniversary of Henry II.'s charter and grant of the mayoral dignity.

**Mr. G. D. Leslie** is engaged on a picture of a young girl and a sleeping cat lying in a window seat overlooking the Thames; and a second picture, a ferry scene on the middle Thames in Oxfordshire.

**Mr. William Morris** gave a lecture at Oxford on Wednesday on "Art under a Plutocracy." He referred to the degradation of the beauty of Oxford, the most beautiful of all towns, and which should have been treated as the jewel of the country, as compared with what he knew of the city thirty years ago.

**The Paintings and Models** for the Royal Academy medals were sent in on Saturday. In figure-painting the subject is *St. Peter Denying Christ*. For landscape the subject has been taken from "In Memoriam." The Creswick medal is to be won by the best representation of a *Country Inn*. For sculpture the subject is *Socrates Teaching in the Agora*.

**Herr Oscar Begas**, the historical painter, died in Berlin on Saturday last. Among the more notable of his monumental works may be mentioned the *Battle of Arminius*, in the Teutoburg Forest; *Reception of the Salzburg Protestants*, in Potsdam; the masterly *Frederick the Great after the Seven Years' War*, in the chapel of Charlottenburg Castle; the compositions founded on the mythical legend of Amor and Psyche, and the paintings in the Festal Saloon of the Berlin town hall and in the Imperial Saloon in the *Passage* at Berlin.

**Mr. J. O. Scott** gave a lecture at Lichfield on Monday upon the restoration of the cathedral.

**A Technical School** is to be established in Coventry. The cost of the buildings and workshops is estimated at 7,000*l.*

**Messrs. Bellamy & Hardy, of Lincoln**, have been awarded the first premium for designs for laying out the proposed new cemetery, and building chapel, mortuary, and lodge, for the Frodingham and Brunsby Burial Board. Mr. Robert Clamp, A.R.I.B.A., of Hull, obtained the second premium.

**General Pitt-Rivers** has been for some days engaged at Penselwood, the site of the ancient British city, "Caer Pensanelwit," which was besieged by Vespasian A.D. 47.

**The Marquis of Bath** has been chosen a trustee of the British Museum in place of the late Earl Somers.

**The Carlisle School Board** have awarded the first premium, and adopted the designs of Mr. Geo. Dale Oliver, of Carlisle and Workington, for the new schools in Lowther Street. The second premium has been awarded to Mr. T. T. Scott, of Carlisle.

**The Autumn Congress and Sanitary Exhibition** of the Sanitary Institute will be held in Dublin in the year 1884.

**The Guarantee Fund** of the International Forestry Exhibition, which is to be held in Edinburgh, now amounts to 5,000*l.*

**Mr. R. Tangye** has notified to the Smethwick Local Board that if public baths are provided for the town he will contribute 1,000*l.* towards the cost. The board has accepted the offer, and the necessary plans are to be obtained.

**Messrs. J. Edmundson & Co.**, of Dublin, and Westminster, have obtained the contract for supplying and fitting up the appliances for the electric light in the saloons and cabins of the City of Dublin Company's mail steamers.

**Public Buildings in Sydney.**—Returns recently printed for the New South Wales Parliament show that the total amount expended on public buildings, fortifications, furniture, &c., completed and in progress, under the supervision of the colonial architect, between 1862 and 1880 inclusive, amounted to 3,598,568*l.* In 1871 the amount expended through the colonial architect's department was 67,651*l.*, whilst in the year 1880 it amounted to 633,274*l.*, or an increase of over half a million of money. During the year 1881 the works entrusted to the same officer amounted in value to nearly a million of money.

**Manchester Society of Architects.**—The remarks in the report of the society, published last week, referred to the Gaiety Theatre, Manchester.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, NOVEMBER 17, 1883.

### EDITORIAL NOTICES.

*The authors of signed articles and papers read in public must necessarily be held responsible for their contents.*

*No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.*

*Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.*

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### COMPETITIONS OPEN.

**ABERDEEN.**—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 19 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will receive a Premium of £50.

**BIRENHEAD.**—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of

100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

**BRIDGEND.**—Nov. 20.—Plans are required for Disposal of Sewage by Filtration in the most economical and beneficial manner. Mr. T. Stockwood, jun., Clerk to the Local Board, Bridgend.

**BRISBANE.**—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

**CAPE TOWN.**—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

**LONDON.**—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

**NORTHAMPTON.**—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street Northampton.

### CONTRACTS OPEN.

**ARMLEY.**—Nov. 20.—For Building Eight Houses. Mr. F. W. Rhodes, Architect, Upper Wortley.

**BECCLES.**—Dec. 7.—For Building Temporary Bridge, Removing old and Building new Bridge. Mr. F. S. Rix, Clerk to the Beccles Navigation Commissioners, Beccles.

**BECKENHAM.**—Dec. 3.—For Additions and Alterations to Stables and Buildings at the Old Manor House, and Formation of Engine Station and additional Stabling, Cart Sheds, Boundary Walls, &c. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

**BOWNESS.**—Nov. 26.—For Additions and Alterations to Business Premises. Mr. Robert Walker, Architect, Finkle Street, Kendal, and Windermere.

**BRADFORD-ON-AVON.**—Nov. 19.—For Building Brewery Stores in Silver Street. Messrs. Weaver & Adye, Architects, Devizes, and Bradford-on-Avon.

**BRADFORD.**—Nov. 20.—For Building Two Houses, Shop, and Coachhouse in Bowling Back Lane. Mr. G. C. Gamble, Architect, 4 Wellington Terrace, Laisterdyke, Bradford.

**BRENTFORD.**—Nov. 20.—For Building Cottage and Extending Cart-shed. Mr. Lacey, Surveyor, 62 High Street, Old Brentford.

**BRENTFORD.**—Nov. 22.—For Building Chapel, Boundary Walls, and other Works in rear of St. Lawrence Church. Messrs. Smithies & Gladman, Architects, 10 Bush Lane, Cannon Street, E.C., and 217 High Street, Brentford.

**CARDIFF.**—Dec. 6.—For Building the Cardiff Exchange, Mount Stuart Square, Hall, Bank Premises, Restaurant, Suites of Offices, &c. Messrs. James, Seward & Thomas, Architects, 1 St. John's Square, Cardiff.

**CHEVINGTON.**—Nov. 17.—For Alterations and Additions to the Chevington North Schools, Broomhill. Mr. William Webb, Clerk to the Chevington School Board, Newgate Street, Morpeth.

**CROYDON.**—Nov. 19.—For Laundry, Engineering Fittings, Engine, Boilers, &c., for the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon. Messrs. Berney & Monday, Architects. Mr. Henry Ward, C.E., Engineer.

**CROYDON.**—Nov. 19.—For Plans for Cooking Apparatus, &c., for 643 Persons, at the Infirmary. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**CROYDON.**—Nov. 19.—For Gasfittings at the New Infirmary, Mayday Road. Specification by Messrs. Berney & Monday. Mr. Alfred G. Blake, Clerk to the Guardians, 15 George Street, Croydon.

**DRESDEN, LONGTON.**—For Building Congregational Church. Messrs. W. Sugden & Son, Architects, Leek.

**DUBLIN.**—Nov. 20.—For the Erection of proposed Public Baths and Wash-house at the corner of Poolbeg Street and the new street to the Swivel Bridge. Mr. D. J. Freeman, City Architect. Also for Engineer's and Plumber's Work connected with the proposed Public Baths and Wash-house. Mr. D. J. Freeman, City Architect, 34 Dawson Street, Dublin.

**DURHAM.**—Nov. 17.—For Building Industrial Schools at Earl's House Farm. The County Architect, Durham.

**ELLAND.**—Nov. 17.—For Building Combing Shed at Albert Mills. Messrs. Horsfall & Williams, Architects, Post Office Buildings, Halifax.

**ESHOLT.**—Nov. 21.—For Building Two Dwelling-houses. Mr. R. F. Rogerson, Architect, Church Street, Brighouse.

**EXETER.**—Nov. 23.—For Repairs to 41 Southernhay. The City Surveyor, 18 Bedford Circus, Exeter.

**EXETER.**—Dec. 4.—For Building Pauper Lunatic Asylum to accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect, 14 Funnival's Inn, London.

**FLEETWOOD.**—Nov. 24.—For Building Post Office and Residence. Mr. C. Pearson Shaw, Architect, 37 St. Peter's Place, Fleetwood.

**FOLKESTONE.**—Nov. 21.—For Building School for 700 Children, with Teacher's Residence, Boundary Walls, &c., Black Bull Road. Mr. Joseph Gardner, Architect, 2 Cherriton Place, Folkestone.

**GLENELG, N.B.**—Nov. 26.—For Masons', Carpenters', and other Works of large Additions to the Glenelg Hotel, Glenelg-by-Lochalsh. Messrs. Matthews & Lawrie, Architects, Inverness.

**HOVE.**—Nov. 22.—For the Construction of a Sea Wall, Inclines, Steps, and Timber Groynes, on the East Fore-shore of the Town. Sir John Coode, Consulting Engineer, 5 Westminster Chambers; and Mr. E. B. Ellice-Clark, Engineer to the Hove Commissioners, Town Hall, Hove.

**IRVINE.**—Nov. 17.—For Building Shed and Offices at Irvine Academy. Mr. John Armour, jun., Architect, Irvine.

**LANCHESTER.**—Nov. 26.—For Building Primitive Methodist Chapel. Mr. George Race, Architect, Westgate, Weardale.

**LEEDS.**—Nov. 19.—For Erection of Outbuildings and Bath Rooms to Three Houses in Hyde Park Terrace, Leeds. Mr. Thomas Winn, Architect, Victoria Buildings, 18 Park Lane, Leeds.

**LIVERPOOL.**—For Laying Out and Draining upwards of 25,000 yards of Walks, and Forming Pools, &c., and (separately) for Planting 3,000 Trees and Shrubs at the Liverpool Zoological Gardens, Walton-on-the-Hill. Messrs. W. Sugden & Son, Architects, Leek.

**LONDON.**—Nov. 20.—For Building Five Blocks of Artisans' Dwellings, Petticoat Square, Middlesex Street. Mr. Henry Blake, Sewers' Office, Guildhall.

**LONDON.**—Nov. 20.—For Construction of Sewers, &c., Mr. Henry Blake, Sewers' Office, Guildhall.

**NEWMARKET.**—Nov. 17.—For Building Engine, Boiler and Pump House, with Chimney Shaft, Settling Tanks, Cottage and Boundary Wall; Supplying and Erecting Engine, Boilers, &c.; Construction of Covered Reservoir, Laying Cast-Iron Pipes, &c. Messrs. Edward Easton & Co., Engineers, 11 Delahay Street, Westminster, S.W.



OLD SWINDON.—Nov. 17.—For Building Premises for the Wilts and Dorset Banking Company. Mr. G. M. Silley, 17 Craven Street, Strand, W.C.

PETERBOROUGH.—Nov. 22.—For the Supply and Delivery of 165 tons of Cast-iron Socket Pipes and 5½ tons of Special Castings, 42 Sluice Valves and Surface Boxes, and 50 Hydrants and Surface Boxes. Mr. W. Matthews, C.E., Borough Engineer, Peterborough.

PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

RYHILL.—For Enlargement of School. Mr. Howard, Ryhill School, near Barnsley.

SOUTHWICK.—Dec. 3.—For Additions and Alterations to Board Schools. Mr. Joseph Shields, Architect, Blockett's Buildings, Sunderland.

STAFFORD.—Nov. 21.—For Construction of Bridge over the Doxey Brook. Mr. W. B. Farr, 43 Tottenhall Road, Wolverhampton.

ST. ALBANS.—Nov. 17.—For Construction of Three Roads, Holywell Meadow Estate. Messrs. Harding & Eve, Surveyors, St. Albans.

ST. GERMANS.—Nov. 29.—For Building Mission Room at Dowerdery, near Hessenford. Mr. J. Piers St. Aubyn, Architect, Lamb's Buildings, Temple, London.

ST. HELIER.—Nov. 23.—For Erection of Pedestal in Granite, and Placing three Figures of Monument "Don." Mr. W. B. Godfrey, 17 Broad Street, St. Helier, Jersey.

THORNBURY.—Nov. 30.—For Providing and Laying Water Mains (500 yards). Mr. F. C. Williams, High Street, Thornbury.

TILHURST.—Nov. 20.—For Alterations to Board Schools and Erection of New Board Schools. Messrs. Brown & Albury, Architects, 150 Friar Street, Reading.

TYNEMOUTH.—Nov. 17.—For Erection of Lodge, Stable Buildings, Boundary Walls to Residence. Mr. W. Lister Newcombe, Architect, 89 Pilgrim Street, Newcastle-on-Tyne.

UPPER WORTLEY.—Nov. 17.—For Alterations to House and Shop. Mr. F. W. Rhodes, Architect, Upper Wortley.

UTOXETER.—Nov. 19.—For Taking Down and Re-building Shop and Premises, Corner of Bridge Street. Mr. J. Beardmore, Architect, Stoke-on-Trent.

WALTHAMSTOW.—Nov. 22.—For Execution of Street Works. Mr. G. B. Jerram, Surveyor to the Local Board, Town Hall, Walthamstow.

WARLEY.—Nov. 23.—For Building Warehouse and Appurtenances at Wainstalls. Messrs. G. Buckley & Son, Architects, Waterhouse Street, Halifax.

WISBECH.—Nov. 17.—For Laying Cast-iron Water Pipes (6,750 yards), &c. Messrs. Edward Easton & Co., 11 Delahay Street, Westminster, S.W.

## TENDERS.

### ASTON.

For Works to Lozells Street, Aston. Mr. BROWN, Surveyor.

Harris, Shrewsbury.  
Bennett & Co., Bilston.  
Jones & Co., Birmingham.  
Biggs, Handsworth.  
Palmer, Birmingham.  
Curral & Lewis, Birmingham.  
LAW, Kidderminster (accepted).

### AUDENSHAW.

For Sundry Alterations and Extensions to St. Stephen's Branch Schools, Denton Road, Audenshaw. Mr. J. H. BURTON, Architect, Ashton-under-Lyne.

Pike, Hooley Hill	£309 10 0
Williamson, Ashton-under-Lyne	307 0 0
Dean, Ashton-under-Lyne	290 0 0
Gibson, Dukinfield	280 0 0
Smith, Fairfield	270 0 0
CLAYTON, Denton (accepted)	265 13 7

### BRISTOL.

For the Erection of a Warehouse, and Altering present Premises at Portland Square, Bristol, for Messrs. Whiting, Webb & Co., Boot and Shoe Manufacturers. Mr. ALFRED HARFORD, Architect and Surveyor, 30 Broad Street, Bristol. Quantities by the Architect.

Forse	£1,250 0 0
Church	1,230 0 0
Gay	1,145 0 0
Williams	1,138 11 0
Walters	1,100 0 0
Lewis	1,095 0 0
Davis	1,090 0 0
Graham	1,090 0 0
Speed	1,063 0 0
Humphreys	1,058 15 0
Wilkins & Sons	1,050 0 0
Bastow	999 0 0
E. & T. Hatherley	987 0 0
Saize & Sons	970 0 0
Gorvett	962 0 0
Eastbrook & Sons	953 0 0
Krauss	935 0 0
Downs	930 0 0
Hayes	851 0 0
JAMES (accepted)	769 0 0

### BIRKENHEAD.

For Wrought-iron Tank for Clatterbridge Workhouse, Birkenhead.

Lindsay & Co., London	£875 0 0
Walker, Pendleton & Co., Liverpool	475 0 0
Tangye Bros., Manchester	350 0 0
Daglish & Co., St. Helens	327 0 0
Smith & Co., Liverpool	325 0 0
Gielgud, London	310 0 0
Shewell & Co., Darlington	297 10 0
Welch & Co., Manchester	288 0 0
Walley, Derby	285 0 0
Brettell, Worcester	254 10 0
Renshaw, Kildgrove	253 10 0
Woodall, Dudley	248 5 6
Radcliffe & Sons, Hawarden	228 0 0
Foster & Co., St. Helens	220 0 0
Russell & Robinson, Workington	210 0 0
WARREN BROS., Burton-on-Trent (accepted)	188 18 6

### BRADFORD.

For Construction of Reservoir to contain 1,250,000 gallons, Bradford. Mr. BARKER, Engineer.

Briggs, Bingley	£3,641 0 0
Parkinson & Bower, Halifax	3,300 0 0
Farnish, Bradford	3,175 0 0
Flinger, Cleckheaton	3,077 0 0
Hinchcliffe & Small, Bradford	3,024 0 0
Bailey, Keighley	2,946 0 0
Milner, Guiseley	2,900 0 0
MOULSON & SON, Bradford (accepted)	2,835 0 0

#### Ironwork.

Messrs. Haley, Bradford	390 0 0
Head & Son, Cleckheaton	329 0 0
THORNTON & CREBBIN, Bradford (accepted)	274 0 0
Marsden & Co., Heckmondwike	270 0 0

### BROCKLEY.

For Repairs and Alterations to the Lodge at Brockley Cemetery, for the Burial Board for St. Paul, Deptford.

Mr. W. T. HUNT, jun., Surveyor.	
Keen	£200 0 0
Holloway	173 0 0
Redman	169 0 0
HALL (accepted)	167 0 0

### CARDIFF.

For Alterations to Shop in David Street, Cardiff, for Mr. W. Rees. Mr. J. P. JONES, Architect.

Jenkins & Griffith	£174 0 0
Jones Bros.	162 0 0
Thomas & James	133 0 0

### CHISWICK.

For Tar Paving, Flagging, Channelling, and otherwise making up the east end of Wellesley Road. Mr. G. R. STRACHAN, Surveyor.

Trickett & Sons, Millwall	£837 4 6
Armstrong, Chiswick	800 0 0
Turner & Sons, Chelsea	685 0 0
Rutter, Bromley-by-Bow	649 0 0
NOWELL & ROBSON, Kensington (accepted)	619 0 0
Surveyor's estimate	640 0 0

### DEVONPORT.

For Construction of Intercepting Sewer (3,700 feet), Stoke Road and Deadlake Lane, Devonport.

Piper, Devonport	£2,873 0 0
Pethick Bros., Plymouth	2,799 0 0
Finch, Plymouth	2,790 0 0
Shaddock, Saltash	2,777 0 0
Smith, Devonport	2,645 0 0
MARTIN, Devonport (accepted)	2,590 0 0

### EAST TWERTON.

For Building Infant School, Altering the Present Boys and Girls' Schools, for the East Twerton School Board. Messrs. BROWN & GILL, Architects, Bath.

Williams, Bristol	£1,943 0 0
Bladwell & Parsons, Bath	1,865 0 0
Birch, Bath	1,680 0 0
Mercer, Bath	1,677 10 0
Mann, Bath	1,664 0 0
Jarvis, Weston	1,660 0 0
Chancellor, Twerton	1,565 0 0
Emery, Bath	1,506 0 0
LAVER, Bath*	1,474 0 0
WIBLEY, Bath†	489 10 0

\* Provisionally accepted. † For alterations of boys' and girls' schools only.

### GAMRIE.

For Building Farm Cottage at Gamrie. Mr. GEORGE A. BRUCE, Architect, Banff.

Davidson, New Pitsligo	£119 10 0
Dawson, Macduff	114 10 0
Massie, Turriff	98 10 0
Fordyce & Sons, Turriff	72 15 0

#### Carpenters.

Munro, Banff	146 10 0
Blake, New Pitsligo	127 10 0
Murdoch, Banff	125 10 0
Murison, Rothie-Norman	114 10 0

#### Slater.

Hutchison, Banff	25 17 6
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#### Plasterers.

Gibson, Banff	33 10 6
Kelman, Macduff	42 10 6
Ross, Turriff	31 12 6

#### Plumbers.

Thompson, Banff	28 18 6
Strachan, Banff	22 7 6

#### Painters.

Chalmers, Banff	16 12 6
Rogers, Banff	15 10 0

### GREAT HARWOOD.

For Sewering, Excavating, Ballasting, Kerbing and Forming of Railway Terrace, St. Hubert's Road, Great Harwood.

Spright, Liverpool	£1,301 0 0
Butterfield, Nelson	896 0 0
Batough, Accrington	798 0 0
Ashton, Darwen	737 0 0
Hunter, Accrington	697 0 0
Taylor & Co., Padiham	621 0 0
Read Bros., Burnley	593 0 0
Broadley, Clayton-le-Moors	592 0 0
HARRIS & JENKINS, Great Harwood (accepted)	583 0 0

### HERTFORD.

For Construction of Footbridge, Hertford.

Taylor & Son	£28 0 0
HUDSON (accepted)	20 18 6

### HORNSEY.

For Alterations and Additions to the Highgate Schools, for the Hornsey School Board. Mr. T. C. CLARKE, Architect.

Greenwood	£1,149 0 0
Clarke & Macey	1,103 0 0
Conder	1,083 0 0
Lawrance	1,002 0 0
Mattock Bros.	991 0 0
Ashby Bros.	964 0 0
Grover	930 0 0
Colls & Sons	909 0 0
Williams & Sons	885 0 0
Nightingale	875 0 0
Scrivener & Co.	855 0 0

### LONDON.

For Fittings at the Storey's Gate Public-house, for Mr. J. S. Manley. Mr. H. I. NEWTON, Architect, 27 Great George Street, Westminster.

Godden	£573 0 0
Lumble	570 0 0
WOOD (accepted)	507 0 0

#### Peuteler's Work.

Mason	97 15 0
Rogers	95 0 0
Warne	89 0 0
HEATH (accepted)	80 0 0

For Repairing Steps, &c., Mantua Street Board School.

Rice	£51 0 0
Mallett	49 0 0
Nightingale	47 0 0

For Repairing Schoolkeeper's House, Gideon Road, for the London School Board.

Ash	£31 15 0
Mallett	29 5 0
Rice	28 10 0

For Building Board School, West Square, Southwark. Mr. E. R. ROBSON, Architect.

Loneragan Bros.	£8,866 0 0
Goodman	7,893 0 0
Larter & Son	7,807 0 0
Gentry	7,786 0 0
Williams & Pritchard	7,733 0 0
Lawrance & Sons	7,716 0 0
Bangs & Co.	7,543 0 0
Hart	7,520 0 0
Greenwood	7,520 0 0
Hobson	7,489 0 0
Patman & Fotheringham	7,482 0 0
Marsland	7,474 0 0
Grover	7,465 0 0
Oldrey	7,466 0 0
Wood	7,451 0 0
Downs	7,397 0 0
W. & F. Croaker	7,337 0 0
Tarrant & Son	7,334 0 0
Cox	7,324 0 0
Smith & Sons	7,304 0 0
Atherton & Latta	7,300 0 0
Sargeant	7,269 0 0
Shepherd	7,264 0 0
Jerrard	7,247 0 0
Wall	7,246 0 0
Shurmur	7,200 0 0
Wall Bros.	7,183 0 0
Perry & Co.	7,110 0 0
Kirk & Randall	7,063 0 0
Stimpson	7,049 0 0
Higgs	6,980 0 0
Reading	6,968 0 0
Lathey Bros.	6,942 0 0

For Enlargement of Board School, Garratt Lane, Lambeth. Mr. E. R. ROBSON, Architect.

Lawrance & Sons	£2,051 0 0
W. & F. Croaker	2,049 0 0
Bangs & Co.	2,040 0 0
Shepherd	2,030 0 0
Patman & Fotheringham	2,000 0 0
Atherton & Latta	1,991 0 0
Grover	1,986 0 0
Kirk & Randall	1,949 0 0
Goodman	1,930 0 0
Jerrard	1,900 0 0
Williams & Son	1,833 0 0
Perry & Co.	1,830 0 0
Reading	1,824 0 0
Larter & Son	1,813 0 0
Tarrant & Son	1,809 0 0
Wall Bros.	1,798 0 0
Hobson	1,787 0 0
Pritchard	1,765 0 0
Gentry	1,720 0 0
Higgs	1,690 0 0
Shurmur	1,674 0 0
Smith & Sons	1,660 0 0
Lathey Bros.	1,651 0 0
Cox	1,648 0 0
Loneragan Bros.	1,629 11 0
Holloway Bros.	1,684 0 0
Stimpson & Co.	1,565 0 0



LONDON—continued.

For Building Board School, Surrey Square, Old Kent Road.  
Mr. E. R. ROBSON, Architect.

Goodman	£12,995	0	0
Pritchard	12,937	0	0
Hart	12,873	0	0
Larter & Son	12,665	0	0
Tarrant & Son	12,588	0	0
W. & F. Croaker	12,577	0	0
Wall	12,540	0	0
Lawrence & Sons	12,509	0	0
Scrivener & Co.	12,494	0	0
Hobson	12,488	0	0
Kirk & Randall	12,458	0	0
Shepherd	12,450	0	0
Greenwood	12,399	0	0
Patman & Fotheringham	12,383	0	0
Marsland	12,365	0	0
Grover	12,333	0	0
Higgs	12,300	0	0
Downs	12,244	0	0
Gentry	12,230	0	0
Oldrey	12,167	0	0
Bangs & Co.	12,136	0	0
Lathey Bros.	12,122	0	0
Smith & Son	12,084	0	0
Cox	11,997	0	0
Shurmer	11,970	0	0
Jerrard	11,939	0	0
Atherton & Latta	11,900	0	0
Wall Bros.	11,876	0	0
Perry & Co.	11,810	0	0
Tongue	11,785	0	0
Stimpson & Co.	11,590	0	0
Redding	11,475	0	0

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Papier, Islington	195	0	0
Ronald, Wandsworth	195	0	0
King, Battersea	172	0	0
GARDNERS, Charing Cross (accepted)	171	0	0
Turtle, Battersea	170	0	0
Lee, Battersea	164	0	0
Stidder, Southwark	152	0	0
Hammond, Battersea	148	0	0

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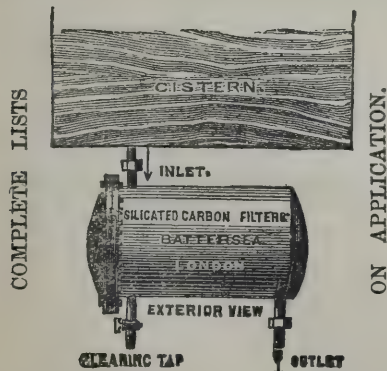
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Mortor	1,927	0	0
Bangs	1,921	0	0
Brass	1,897	0	0
Killby & Gayford	1,883	0	0
Conder	1,851	0	0
Greenwood	1,839	0	0
Lawrance	1,825	0	0
Ashby & Horner	1,678	0	0

MORLEY.

For Alterations and Additions to Bridge Street Mill  
Morley. Mr. F. A. BUTTERY, Architect, Morley.

Clegg & Son, Morley, joiners	£230	0	0
Dodgshun & Co., Morley, ironfounders	220	0	0
Ainsworth, Morley, mason	194	0	0
Jackson, Morley, plumber	46	17	6
Sharp & Harper, Leeds, slater	21	15	0
Architect's estimate	750	0	0

NORTH LEW.

For Restoration of the Parish Church of North Lew, near  
Exbourne, North Devon. Mr. R. M. FULFORD, Archi-  
tect, Exeter.

Gibbard, Exeter	£1,112	0	0
Pethick Bros., Plymouth	1,050	0	0
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Wiffin, Holsworthy	815	0	0

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Architect.

Bennett, Birmingham	£3,547	0	0
Garlick, Birmingham	3,490	0	0
Horton, Brerley Hill	2,998	0	0
Jones & Sons, Sedgley	2,990	0	0
Bradney & Co., Wolverhampton	2,977	0	0
Horsman & Co., Wolverhampton	2,975	0	0
CLARK, Wolverhampton (accepted)	2,900	0	0

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Foundation.

Parfitt	£1,423	0	0
Martin, Wells & Co.	1,402	0	0
Hack	1,187	0	0
Nightingale	1,080	0	0
Tink	982	0	0
Hearle & Son	869	0	0
Hobbs	850	0	0
Reed	759	0	0
Mortor	730	0	0
Gentry	720	0	0
Hoskings	716	0	0
Gibbon	700	0	0
Cox	700	0	0
GREGAR (accepted)	670	0	0
Bolding	657	0	0
D. D. & A. Brown	539	0	0
Architect's estimate	750	0	0

Superstructure.

Hack	£10,099	0	0
Bolding	9,977	0	0
Nightingale	9,684	0	0
Martin, Wells & Co.	9,598	0	0
Hoskings	9,317	0	0
Hearle & Son	9,292	0	0
Tink	9,257	0	0
Hobbs	9,200	0	0
Mortor	9,117	0	0
Cox	9,100	0	0
D. D. & A. Brown	8,996	0	0
Gibbon	8,900	0	0
Reed	8,890	0	0
GREGAR (accepted)	8,867	0	0
Parfitt	8,697	0	0
Gentry	8,500	0	0
Architect's estimate	9,400	0	0

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# The Architect.

## THE BUILDING PRESSURE ON THE LONDON POOR.



OW to lodge the lowest classes of the population in London has long been one of the pressing problems of the age; and within the last few weeks it has acquired, almost accidentally, an exceptional interest, in which it is desirable that the readers of such a journal as *The Architect* should fully participate. Perhaps we may add that a scientific understanding

of the whole problem depends a good deal more upon professional builders, if they would but set their minds to it, than upon philanthropists, for instance, or even legislators.

It will be remembered that Sir RICHARD CROSS, when in office a few years ago as Home Secretary, carried through Parliament a measure from the operation of which much was expected by some and little by others:—in few words, the municipal authorities were authorised to effect a compulsory purchase of the worst house property they could find, and forthwith to pull down the houses and sell the land for the erection of “artisans’ dwellings,” at whatever the financial loss might be. This loss was very soon found to be in its degree ruinous; an experienced public body like the Metropolitan Board of Works dared not to face it; when the principle of the scheme was translated from the enthusiastic rhetoric of beneficence into the plain language of a commercial balance-sheet, it simply signified that the “rookeries” were to be bought up “at any price” by the ratepayers, and sold “at any price” in a very different sense to certain Associations which make it their business to house people of the working class upon what must necessarily be exceedingly cheap land. The property, therefore, which must be bought prodigiously dear, must be sold prodigiously cheap, and the difference, as we have said, is ruinous. It is virtually the failure of Sir RICHARD CROSS’s Act that has brought about the present agitation.

Without touching upon the domain of party politics, we may observe that it was the Conservatives who in this enterprise had assumed the attitude of the poor man’s friends, and that it was the Liberals upon whom there seemed to be thrown the necessity of favouring a less generous policy. Such an incident, however, is easily accounted for. Apart from everything like that competition for popularity between rival parliamentary parties, which is an essential element in our constitutional system, it is obviously natural for the more aristocratic party in the State to regard it as their duty to provide for the poor, while it is equally natural for the more commercial party to leave “the labour market” undisturbed by those protective influences of State intervention which political economy generally objects to authorise. The Conservatives, consequently, were undoubtedly the right party to devise a scheme for housing the poor at the public expense, and, if they saw their way at the same time to make political capital out of the movement, no politician surely could blame them. But it would obviously be somebody’s duty to prove the scheme to be commercially impracticable, as even Conservatives by this time must see that it is; and we may probably say that the Liberal party has ever since that time been consequently placed in a position of political danger upon this question, and (as politics go) quite legitimately so.

When, therefore, Lord SALISBURY published the other day a magazine article on the subject, this may be regarded as the right step for the Conservative leader in Opposition to take in the circumstances; and there is no necessity for considering such a step to have been prompted otherwise than by the combined motive of a desire to induce the State to help the poor and an equally strong desire to compel the Government to take up an embarrassing question.

The noble Marquis’s dissertation was of course duly criticised by the literary and philanthropic world, simply because it was the noble Marquis’s; but, equally of course in the circumstances, nothing came of that except words. Then the *gravamen* of the complaint was dutifully taken in hand by an assembly of Nonconformist divines, which happened to be

then in session in London for the periodical direction of denominational affairs. Kindhearted Churchmen promptly followed, under the same sense of duty; for there is no other class of men in London, not even the medical profession, who have to witness so closely and so continuously as the clergy do the miseries of the poor. Then there was suddenly sown broadcast over the town a fervid appeal in the form of a pamphlet called “The Bitter Cry of Outcast London;” and from hundreds of pulpits, and in almost hundreds of newspapers, the echo of this bitter cry has been persistently assailing the public ear. In one of our morning journals more particularly, a dexterous dramatic writer has been engaged to magnify to the uttermost the intensity of the appeal, in a series of descriptive articles under the uncompromising vernacular heading of “Horrible London.” But, what is much more to the point practically, Sir CHARLES DILKE, as the representative of the Cabinet, is exploring the slums—as Sir RICHARD CROSS did before him—manifestly and properly for the political purpose of meeting Lord SALISBURY’s challenge. Whether anything of real avail will come out of it all is, however, as problematical at this moment as it can well be. For it is useless to deny the overwhelming difficulty of the problem, both morally and materially; and, indeed, if anyone could be supposed to have thrown down the gauntlet to the Government upon this question of the Poor of London for some such clever purpose as to preoccupy the hands which had undertaken to tackle the Municipality of London, it might be (as politics go) precisely the most judicious move on the board. And, what is more, if Lord Mayors, Aldermen, Common Councils, Livery Companies, and Vestries are to retain their places as tenants at will until the poor are all comfortably housed, they may safely regard themselves as tenants for ever. Possibly (as politics go) the next judicious move may be to pronounce the reform of the City a necessary preliminary to the reform of the Slums; we cannot say. At all events, for our own part, speaking professionally as we are alone entitled to do, we certainly should like to see, by whatever means may be possible, some reform of the slums at least attempted. But then, inasmuch as it is a universal rule in these scientific days that no reform can be attempted with a chance of success unless it be founded first upon a clear understanding of the facts that render it necessary, we must take leave to express the hope that public opinion may have its attention fixed as soon as possible upon the root of the matter, which we take to be simply this—the inevitable and inflexible pressure of London building for London business.

Denunciation is always adopted as the first mode of operation in cases of this kind. At present, therefore, we have denunciation of the Metropolitan Board—which we may at once say is absurd; denunciation of the local vestries—which we admit may be a much more reasonable thing; denunciation of the selfish and shabby class of house-farming vestrymen—in which, we need only say, *The Architect* has dutifully taken its part for some time back, and scarcely need further follow now; denunciation of all-abounding Taverndom—although it is affirmed by many that this is the effect, and not the cause, of “horrible” homes; and various other denunciations of a more general and less practical kind, which frequently only complicate the question. But angry denunciation must cease before calm inquiry can begin, and if it succeeds in stimulating earnestness, we may be content to let it have its say.

The nature of the building pressure in London is aptly illustrated by the case of New York, which we took occasion to describe some months ago. The result in New York is that the houses are being, so to speak, squeezed up to a height of 100 feet, 150 feet, in some instances even 180 feet! It is of no use to wonder, and perhaps laugh, at this. The cause is the simple circumstance that the business quarter of that most “go-ahead” of all earthly paradises is, like the “City” and some other business quarters of London, coming to be so tightly crammed and over-crammed with counting-houses, offices, shops, warehouses, and manufactories (and we must not omit the necessary widening of the streets), that every foot of ground has been rising in value year after year to a marvellous extent, merely by the competition of those who *must be in the midst*. In New York the very peculiar position of the great commercial nucleus—it is surrounded by water on three sides—prevents it from expanding laterally; and it is expanding vertically, therefore, in the alarming way we have stated. In London, where, as it happens, there are several



such nuclei, and where all of these are more or less able to accomplish lateral enlargement, the force of expansion is as yet only pushing out the poor. The process was aptly described—and unconsciously—by a small maker of mops at the meeting of the people of the Mint held one day this week. Many years ago he had two rooms to live in, for which he paid a certain weekly rent. The time came when his rent was raised; he could not see why this was, but he managed to pay the increase. Then it was raised again, and he could no longer manage to pay; he gave up one of the rooms. Now the time has come when even this one room cannot be left to him, nor anything in the shape of a room of any sort; a "clearance" is to take place, and the ground must be otherwise occupied. In fact, he has been gradually squeezed out. Speaking more scientifically, the struggle that is still going on amongst men of business for more elbow-room has advanced the value of the ground by degrees till it is too dear for poor men's dwellings to keep their hold upon it anyhow or anywhere. When in such circumstances the well-meant scheme of Sir RICHARD CROSS is attempted to be put in operation, the effect, sad to say, is only to tighten the pressure. The little maker of mops will not even be allowed to enter the "PEABODY buildings;" they won't take in such as he; away he goes into the abyss more irretrievably than ever, and the squeeze still goes on!

### HETH AND MOAB.\*

IN the early days of railway schemes a good deal of strategy was needed in order to take a section or make a survey of a line. The possibility of obtaining a sum of money for land that was far in excess of the value was then unknown to the landlords, and accordingly they opposed the surveyors, with the aid of tenants and other retainers. GEORGE STEPHENSON was at one time very nearly finding himself in a pond, and on another occasion he was threatened with the lock-up. He was watched by night as well as by day, and guns were constantly fired to deter him and his staff. But all the feats of danger which were accomplished in Lancashire or Yorkshire were tame affairs, if compared with what was lately accomplished by Captain CONDER in Egypt. It was not an irascible, good-hearted proprietor that opposed him, but the Turkish Government, and yet in the sight of the army of officials he surveyed about five hundred miles of country. The history of his raid on Moab is not, however, the principal subject in Captain CONDER's book, nor does he aim at self-glorification. Having had the opportunity of examining a most interesting part of Palestine, and of living in the tents of tribes that are supposed to be outside the pale of civilisation, he has in a frank, manly way described what he saw. His book on Heth and Moab has, indeed, much that will interest archæologists, politicians, and anthropologists, as well as biblical students.

At the end of March 1881, Captain CONDER and his coadjutor, Lieutenant MANTELL, arrived at Beyrout, having a commission from the Palestine Exploration Fund to undertake the survey of the region lying on the east side of the Jordan, the plans of the western side having been already completed. As it was necessary to wait for assistants and stores from England, Captain CONDER resolved to employ the time in seeking for the site of the Hittite capital. The route lay through Baalbek, and there he heard that all surveys were prohibited, unless there was authority for them from the Sultan who now reigns. However, he was permitted to travel, and continued his journey northwards. A ruin called Kades, on the south slope of Tell Neby Mendeh, was identified by Captain CONDER as the site of Kadesh, a Hittite city which is represented in the great Egyptian battle-pieces at Thebes and Abu Simmel; and he gives an animated description of the contest:—

Standing on the acropolis of the sacred Hittite fortress of Kadesh, we could, in imagination, see enacted at our feet all the episodes of that battle famous more than thirty-two centuries ago. We might picture the serried ranks of the Egyptian infantry advancing northwards, with the light chariots yoked each to its pair of horses, and hung with quiver and shield. We could see the

adventurous Rameses, with his scanty following, coming down from the rougher land into the open plain, north-west of the city, and the host of the Turanian warriors concealed beyond the river and by the great Tell itself. We might almost hear the cries of the wild Hittites dashing over the bridges in their chariots to intercept the incautious monarch; their long pigtails floating behind them as these red-booted and mustachioed princes, with their cloaks swelling in the wind, urged on their steeds. The dark beards and eagle noses of the Semitic allies, with their shawl-heads, so like that of the modern Arab, contrast with the Tartar-like mien of their Turanian masters, and with the slimmness of the Egyptians. The clash of the opposing chariots is hidden by clouds of dust from the corn-lands. The first brigade of Ra, the God of Light, gives way before the Hittite charge; but Rameses, calling aloud to his father, Ammon, to help him, rallies his hosts, and the panicstricken Syrians flee.

The next point in Captain CONDER's journey was the lake of Koteineh, where there is a remarkable dam about half a mile in length, and V-shaped, like a cutwater. Afterwards, the city of Homs, the ancient Hemesa, was visited. Here basalt is the principal building material, and the place is full of fragments of Greek and Arab inscriptions, coins and gems. The "Mosque of Light" is an ancient basilica of three aisles, with Early Byzantine capitals to the columns. The travellers afterwards turned southwards in the direction of Tripoli, and on their way they examined the Crusaders' castle of el Hosen, or Crac. It is well preserved, the gates of oak studded with iron still remain, and the delicate tracery of the windows in the beautiful chapel. Captain CONDER was able to closely examine the masonry, and the following observations on the Crusaders' work in Palestine will be read with interest:—

The masonry of the Crusaders is here, as everywhere else, drafted with a boss, which is left rustic in exterior walls, but finely finished in the interior. It is a very common mistake to suppose that such masonry was found and reared by the mediæval architects, but we have now good evidence to show that it was actually cut by the Gothic masons, as in Cyprus also and elsewhere. Indeed, so far from drafted masonry indicating Jewish or Phœnician builders, we have no evidence whatever that these nations ever used it, though we know that Greeks, Romans, Byzantines, Crusaders, and Arabs all drafted their stones. The Jerusalem temple walls and those at Hebron give no contradiction of the supposition, for they are, in all probability, Herodian imitations of Greek or Roman work. Here at Crac we find masonry drafted, yet dressed with the peculiar Gothic diagonal dressing, and, moreover, marked with masons' marks. We find pointed arches with the keystone cut out to form the point, and yet drafted, as are the remaining voussoirs.

The masons' marks are of considerable interest, and the subject has now been carefully studied in all parts of Syria. They are distinctive of the Crusading work of the twelfth and thirteenth centuries, and are found on all the best-finished stones on the walls of such buildings, but especially on interior walls. The same mark is found in places separated by hundreds of miles, and in English cathedrals and Persian palaces no less than in Crusading castles or churches. The same work is used in buildings which differ in date by more than the lifetime of a single man; and I have found all the letters of the alphabet save *Q*, which seems to indicate that the masons were French or Italian. *X* is doubtfully found, and so, curiously enough, is *D*; but the marks are not merely letters, for many very interesting signs also occur. Among these more suggestive marks may be noted the "Solomon's Seal" or five-pointed star, "David's Shield" or the double triangle giving six points, the lituus or crozier, the fish, the cross, the trident, the arrow, the *fleur-de-lis*, the hammer, and other well-known emblems of good luck. The two first are Indian caste marks, as is also the trident; the letters of the Slav alphabet, dating earlier than the ninth century, are also in many cases exactly like the Norman masons' marks; and several of the masons' marks, found by Ouseley on the old palace of Saaditalat, near Ispahan, are the same as those copied in Syria, including the cross, the arrow, the hour-glass, the trident, and the square.

No doubt in some cases a letter was put on the stone by way of claiming its workmanship, as, for instance, at Rosslyn, where such a mark is found on the famous "prentice's pillar," no doubt cut by that proud mason to mark his own work; and this perhaps accounts for the marks being always on the finest stones. There is evidently no indication intended of the position for which the stone was destined; but in many cases it seems pretty clear that the signs were intended as charms to secure good fortune to the building, just as the hand or the "Shield of David" is now painted in red on doors and walls by the Moslem masons in Syria.

Crac was one of the principal European strongholds in Syria, and it would long have remained one if the Frank possessors had not degenerated. Its history should be a warning to those who are compelled to rule a far larger territory in India. From Tripoli, where he saw a strange Dervish

\* *Heth and Moab: Explorations in Syria in 1881 and 1882.* By Claude Reignier Conder, R.E. Published for the Committee of the Palestine Exploration Fund, by Richard Bentley & Son.



dance of a kind that is seldom witnessed by unbelievers, Captain CONDER returned to Beyrout. What he saw in his journey through the Land of Purple recalled the Phœnicians, about whose influence he is sceptical. "At one time," says Captain CONDER, "they were credited with almost every antiquity which could not otherwise be accounted for. All drafted stones, whether of Greeks, Romans, Crusaders, or Saracens, were pointed out as having 'the Phœnician bevel,' though there is nothing to show that the Phœnicians either bevelled or drafted their masonry." At Tyre Captain CONDER tested M. RENAN's theories, and found them to be unsafe. His "immense hypogees" are in some cases only disused quarry pits, and other remarkable statements are also derived from the French scholar's imagination. But archæological exploration was of secondary importance to Captain CONDER. The time had arrived for him to attempt the survey of the land of Moab. It was necessary to obtain a new firman, and he was aware of the delays and difficulties of the Turkish Circumlocution Office. Accordingly, while he appeared to be waiting for official authority in his tent, he one day crossed the Jordan and began laying down his base lines. The country was in an unsettled state, and, although Captain CONDER has little fear if opposed to ten or a dozen Arabs, still there was danger to his small party if they were attacked by a horde. Accordingly the aid of a chief called GOBLÂN was purchased, and it would be hard to find a character better adapted for a melodrama or a picture :—

A tall, gaunt man with a gray bronzed face, half hidden by his shawl, one eye red and sightless from the sword cut, which has furrowed all one cheek, and of which he is much ashamed, because it was a blow from an injured relative, and not a wound received in fair fight. His hair (as I saw accidentally one night) is long and silvery, and his beard quite white. His age is probably about seventy, though he either does not know or else conceals it, for he told us that he believed himself to be about forty. He wore a double kufeyeh, the inner shawl black, the outer one black with gold embroidery. His shirt was white and clean, with a kumbaz or long gown fastened by a belt with yellow and purple vertical stripes.

It is a pity that the portrait of so picturesque a fellow was not sketched. For half a century he was pursued by a tribe of enemies who wished to kill him on account of a blood feud; the Government were eager to capture him, but he contrived to baffle all his foes. His attention to Captain CONDER was remarkable. The country which was to be surveyed is less visited by Europeans than that on the western side of the river. It is full of wild gorges and desolate wildernesses, and the descriptions suggest the impression that scenes of the kind were likely to make on the minds of primitive worshippers. The principal city is 'Ammân, where there is now a colony of Circassian exiles. There are two interesting works in 'Ammân, viz., a Moslem building on the citadel hill, and another discovered in 1882. They both—according to Captain CONDER—belong to the tenth century, although by other authorities they are ascribed to an earlier period.

Moab contains many monoliths and other primitive stone monuments, and their existence is a testimony to the genuineness of some of the statements in the Old Testament. In one place, where there are seven remarkable stones, Captain CONDER supposes that they are the altars which BALAK raised. Pisgah was visited, but the view from it differs from that described in the Bible. There are a great many of those scenes which might have been illustrated with advantage; and, in fact, the absence of plates is the only drawback to the full enjoyment of a book which will add to the reputation of the author of "Tent Work in Palestine."

#### PARIS NOTES.

AT the very last moment the closing of the Triennial Salon which was to have taken place on the 15th inst., was postponed until the end of the month. This fresh prolongation has been made at the request of the Director of Fine Arts, in the hope that the extra fortnight will raise the total receipts to a sum sufficient to pay the expenses. Up to Wednesday, the 14th inst., the takings had amounted to 75,000 frs., the daily receipts for admission having averaged about 1,100 frs.; and as the exhibition will have twelve more paying days to account for, the total result of the returns for admission to the end of the month should reach

90,000 frs., a sum that it is estimated will cover all outgoings. The State, it must not be overlooked, has also allowed the sum of 100,000 frs. towards the organisation of the Salon. This subsidy will, therefore, remain intact, and will be carried to the credit of the Fine Arts Department. Unforeseen expenses will be further met by the sums tendered for the monopoly of the catalogue, and the maintenance of the refreshment-rooms established in the precincts of the exhibition.

The Association of French Artists will hold a general meeting in the St.-Jean Hall of the Hôtel de Ville on the 29th inst. to hear the report of the managing committee on the financial position and work of the society during the past twelve months. On this occasion an important discussion on the question of an artist's property in his creations is likely to arise. A few days ago the Société des Artistes Libres submitted the following motion for consideration by the committee of the elder association: "That it is the duty of the Association des Artistes Français to make common cause—morally and even pecuniarily—with M. Karl Daubigny in his defence of the principle of artistic property; and that the action brought by that gentleman against the forgers of co-called paintings by his father ought, therefore, to be supported by his *confrères* as a body." It is understood that this proposition, which was presented to the committee by M. Tony Robert-Fleury, met with a general approval at the hands of that body, and, under its auspices, will be brought before the general meeting next Thursday.

Several small exhibitions are being organised for December. The friends of André Gill, the caricaturist, who is happily now almost restored to health, are arranging for an exhibition of his works between December 15 and January 15, in the Galerie Vivienne. It will comprise not only paintings, drawings, and studies by the popular artist, but also numerous original sketches executed for his caricatures. The proceeds of the exhibition will be devoted to providing for the needs of the artist during the period of convalescence.

The Minister of Fine Arts has decided that the exhibition of the late M. Manet's works shall be opened at the School of Fine Arts on January 2. About 150 works by the leader of the realist school of painting will be on view.

Another exhibition announced is that of the works of the late painter Sellier, which will be held in the great hall of the Fine Arts School, placed at the disposal of the artist's widow for this purpose, throughout the whole of next month.

A new gallery has been opened at the Louvre, containing sculptures from Chaldea, Assyria, Phœnicia, Judæa, and Cyprus. It is entitled the Salle des Antiquités Orientales. The evacuation of the Salle des Etats by the Municipal Council, who for several years has held its meetings there, places a large additional space at the disposal of the museum authorities. This vast hall, which had been divided by wooden partitions, galleries, &c., to provide for the various services of the Council, has now been restored to its original state and handed over to the Fine Arts Administration. It is intended to fit it up to receive pictures.

M. Cormon has just terminated for the ceiling of one of the rooms of the St.-Germain National Museum a large decorative painting, representing *The Iron Age*. It will be exhibited in the next Salon.

M. du Locle has been sent on a mission to Italy, charged with the execution, on behalf of the French Government, of water-colour reproductions of the frescoes in the House of the Drunken Fawn at Pompeii. These paintings, which are unfortunately very nearly effaced, represent a series of burlesque scenes that throw much light upon the theatrical arrangements and *mise en scène* of the ancients.

The Government has undertaken the maintenance of the School of Ceramics, founded by M. Dubouchet at Limoges, and has recognised it as an establishment of public utility.

The Exhibition of Incoherent Art, lately held in the Vivienne Gallery, resulted well for the poor of Paris, M. Jules Lévy, the president of the society, having handed over to the Director of the Assistance Publique a sum of 6,700 frs. as the net profits of this eccentric show.

A prize of 2,000 frs. was recently offered by the State manufactory of Beauvais for the best design for a sofa to be executed in tapestry. The award has been made during the past week, the successful competitor being M. Couty, professor at the Nice School of Decorative Art, and a pupil of M. Galland.



M. Reinach, a member of the French School at Athens, and M. Babelin, of the National Library, are about to start for Tunis with the intention of undertaking extensive excavations on the site of ancient Carthage, and of collecting everything that will throw light upon Phœnician civilisation. The Government vessels on the station have been directed to lend every assistance to the explorers.

A set of chimney ornaments, consisting of a clock and two candelabra in Louis XVI. style, which formed part of the furniture of the Palais Royal previous to the Revolution, has just been purchased, it is said, for the sum of 100,000 frs. by a well-known member of Paris society, who desires to present them to the Princess Amélie d'Orleans as a *souvenir de famille*.

## EXHIBITION OF FRENCH ART IN GLASGOW.

IN continuation of the series of exhibitions of works of decorative art which have been held yearly during the past few seasons, the committee of the town council some time ago resolved that the exhibition during this winter should be specially devoted to the illustration of French art manufactures. The *Glasgow Herald* says: Considerable progress has now been made in the acquisition of loans of French art objects, and the preliminary preparations for the exhibition are in so advanced a condition that it is expected to be opened about December 17. The most remarkable features of the exhibition will probably be the display of French furniture of the eighteenth century, which is expected to include examples of the famous inlaid work of Charles Andre Boulle, commonly known as buhl work, and of the productions of the numerous workers in marquetry and chiselled brass of that period. Loans of several very beautiful collections of Sevres porcelain have also been promised, which will be sufficient fully to illustrate that most important department of French decorative work, and valuable contributions of fine ancient velvets and other artistic textiles, tapestries, and laces have been secured. The rare and costly enamels of Limoges, miniatures, jewellery, artistic snuff-boxes, and magnificent-painted fans will also form features in the collection, which will certainly be at once interesting and valuable to the ordinary visitor, and to the student of decorative art and professional designer. As usual, the nucleus of the collection will be supplied by the Science and Art Department, but around that there will be contributions of great importance from several of the leading noblemen and collectors both in England and Scotland. Among the principal leaders are His Grace the Duke of Hamilton, the Marquis of Bute, the Earl of Wemyss, the Earl of Glasgow, Lord Balfour of Burleigh, the Hon. W. F. B. Massey Mainwaring, and Miss Nisbet-Hamilton, and it is expected that His Grace the Duke of Buccleuch will, as in former years, give generous support to the undertaking by lending examples of the buhl furniture in Dalkeith Palace—the finest in existence—and other specimens of great value and importance.

## MR. RUSKIN ON "SINCERITY" IN LANDSCAPE ART.

IN his last lecture at Oxford, Mr. Ruskin spoke of the works of Wilson, De Wint, and other landscape painters of their period. The very lowliness of subject and simplicity, he said, make the work of Wilson, and Stanfield, and De Wint, of Robson and of Fielding, all the more valuable for the average student; and the small rooms of the Old Water-colour Society, which were covered by their drawings, presented an aggregate of unaffected pleasure of which those can have no idea who only know the enormities of luscious and luxurious art which flaunt and glare on the miles of exhibition walls in modern galleries. "The great secret of these men's success was the rare sincerity of their pleasure in their subjects—a pleasure as simple and romantic as a young girl, in sympathy with which (added Mr. Ruskin) I have said and done all that in my words or works may have been of any value." "Romantic" he used in opposition not to "classic," but to "prosaic"—with all the selfishness and stupidity that belong to prosaic people. The best types he could give of non-romantic persons, with no interfering element of vulgarity, were Henry VIII. and Charles II.—"the destroyers, according to their power, the one of English religion, the other of English morals—and culminating types, both of them, of all that seeks to rob God of His honour." And in painting, the best type of the non-romantic work against which the pre-Raphaelites revolted was Vandyck's *Miraculous Draught of Fishes*. Near this picture in the National Gallery hangs a Teniers, *The Château of Teniers at Perck*, which is a perfect type of all that was assailed by our landscape school. It represents "some ordinary Dutch trees, some ordinary Dutch clowns, and an ordinary Dutch duck-pond—unless the concession

to the grand style in the size of the pond requires one to call it rather a goose-pond. The colour is all grey or brown, and the atmosphere suggests the idea, not merely that the sun has disappeared for the day, but that it has gone for ever, leaving a stable lantern in its place. The general effect of the picture being far from exhilarating, it is relieved by three figures—two gentlemen and one lady—all of them standing perfectly upright, with expansive boots and tall hats; while a rustic fisherman presents to them, as a tribute to their interest in natural history, a fish which has been elicited from the pond by six other fishermen wading in the pond up to their calves. This work is, of course, hung on the line, while Tintoret's and Gainsborough's are skied; but in this instance any student may feel grateful to the authorities in our National Gallery for giving him so good an opportunity of seeing a picture which exhibits the utmost stoop possible to manual dexterity. It is exactly typical of the spirit of avaricious trade and unrestricted luxury, bent only on pleasure and gain, which has ostracised the spiritual sun, and which lives only by the snuff of the wick of its own mental stable lantern." It was long before art freed itself from this "stupor of the Stygian pool brooded over by Batavian boors." Rubens saw nothing in mythology but corpulence; Gainsborough knew no other goddess than Mrs. Graham; and Reynolds sought in vain to find the "Age of Innocence." But at last a school arose in England which sought and found in the solitary places of the earth a beauty and a pleasure which consisted neither in pride nor in sensuality. To Richard Wilson Mr. Ruskin ascribed the credit of beginning the sincere art of landscape. But the first impulse was given by the poetry of Scott and Byron; the love of mountains which is so conspicuous and so sincere in both these poets forced their illustrators to learn the beauty that is among the hills, and especially the charm of wreathing mists and wandering clouds. "Well, do I remember," said Mr. Ruskin, "the day, fifty years ago, when a little drawing by Copley Fielding was brought home in triumph to Herne Hill, to form the foundation of that collection of landscape art some portion of which, at Cambridge and here, it has been allowed me to make permanently national. The picture which filled our back parlour with proud surprise and gratulation was only of a gleam of sunshine on a bull and a couple of drivers, with some distant hills seen through a soft curtain of driving rain. An undergraduate friend, fresh from Eastern travel, was staying with us, and came into the room to see the cause of our ravishment. He looked at the cheerless scene and remarked, 'But, Ruskin, what is the use of painting such very bad weather?' To which question I could only make the reply that there was no such thing as bad weather, but only different kinds of pleasant weather—some demanding, indeed, courage and patience for their enjoyment, but all of them fittest in their seasons—best for the hills, for the cattle, the drovers, my master and me! The weather might be bad for Greek or Saracen, but for us these simple pictures of mountain mist were more precious than Titian's blue skies or Angelico's gold rings of Paradise." It is, indeed, characteristic of the English landscape painters that they show no thought or invention; they are themselves only "a kind of contemplative cattle, who like being out of doors." Do not, however, suppose, Mr. Ruskin added, that fresh air is easy to paint. "A modern French sensational landscape could, indeed, well be painted in ten minutes. A liberal expenditure of gas tar, with some oil to make it stick, will do it for you in no time. You must, however, remember the claims of 'solemn symmetry,' and the necessity of making your picture look exactly the same upside down; and thus, if you have six or seven streaks for clouds above, you must have six or seven below for a pool. Then add some black bushes and a log-like dead body, and your picture will be the talk of the season. Far other is the discipline required of the least disciple of the English water-colour school. The amateur brush flops over every outline, and speckles its colours so that the work is never finished till it is half washed out; but there is no greater marvel in art than the absolute precision with which the masters of this school lay on their smooth tints."

## ART AND DEMOCRACY.

THE lecture which was delivered lately in Oxford has inspired several letters against Mr. Morris's propositions, viz.: 1. That the present prospects of art, and especially of what may be called industrial art, in this country are such as to induce a feeling of despair. 2. That the best remedy for this condition of things—the true source from which we may hope to regenerate our national taste—is Socialism. Mr. C. L. Eastlake writes:

It will be strange if the accuracy of these opinions remains long unchallenged. For my own part, having watched with keen interest the progress of British art for the last twenty-five years, and after making due allowance for that love of novelty which has in all ages influenced and always will influence the taste of the public, I do not remember any time within the period I have mentioned when the higher arts, especially architecture and painting, in this country were distinguished among educated experts by more refinement and originality of treatment than at present. In the minor arts a still greater advance has been made. There is



scarcely a branch of national handicraft into which the element of taste enters, whether cabinet work, textile fabrics, metal work, paper-hangings, or glass manufacture, that does not indicate a marked improvement in design, and consequently a higher and more delicate appreciation of art among the public. Indeed, I should not be surprised if among Mr. Morris's own customers there were found many of that unhappy class whom he describes as "living in swinish comfort," so widely have his efforts to invest our homes with an artistic character been recognised and esteemed. Of what, then, does Mr. Morris complain? That machinery has taken the place of hand labour? As well might one lament that railroads have superseded the mail coach, that cheap postage and telegrams have lessened the literary value of correspondence, or that photography is interfering with the engraver's vocation. The nature and aspect of art have ever varied and always will vary with the external conditions of life by which it is surrounded, and we can no more conduct our manufactures on mediæval principles than we can adopt the language of Chaucer or arm our regiments with crossbows. Life in the nineteenth century has lost many characteristic features which lent romance to the Middle Ages; but the truest artist is surely he who, accepting the altered condition of society as inevitable, so shapes his art that it fulfils an honest unaffected aim in his own epoch. The aspect of physical nature, the emotions of the human heart, are much the same now as in the golden days of the early Renaissance, and afford now as then an endless source of inspiration to the painter and the poet.

Into Mr. Morris's scheme of social and political reform, so far as it is expressed or suggested by his lecture, I do not propose to enter; but, apart from abstract questions of morality and justice, I have much mistaken the disposition of the British workman, and greatly misinterpreted the lessons of past history, if the spread of Socialistic doctrines would tend to improve the dwellings of the poor or advance the cause of art; and I venture to add my conviction that the ultimate effects of Democracy, if ever it should be established in this island, would be to render it, even in Mr. Morris's eyes, anything but an "earthly paradise" for the artist or the workman.

### ILLICIT COMMISSIONS.

THE following letter has been addressed to the editor of *Truth* by Mr. C. Harston, architect:—

Sir,—The secretaries of the Royal Institute of British Architects might with propriety have included in their defence the whole profession, and not only the members of their body.

You ask (1) "Why this extraordinary trade custom prevails?"—the custom in question being that of allowing large discounts on the list prices of articles used in the building trades—and I will endeavour to give you a satisfactory reply. This custom, then, prevails at wholesale houses in all trades, partly for the purpose of keeping the retail buyers in ignorance of the actual profit of the retailer, and partly for the facilities which it offers for the adjustment of prices. You quote the discounts on certain articles in the building trade, but much higher discounts are customary on other articles. Take, for instance, screws, with a discount of about 90 per cent.; wrought-iron pipes, 40 to 70 per cent.; and drain-pipes, 20 to 50 per cent. In all these cases the list price is permanent, and by means of the discount it is made to apply to the various qualities of the same article, and adjusted to the fluctuations of the markets.

You ask (2) "Whether the members of your Institute are in blissful ignorance of it?"—i.e., the discount custom. Manufacturers and builders will, if possible, keep architects in ignorance of these matters, but they succeed only in the case of the very inexperienced men.

(3) "Whether they, or some of them, do not certify to the correctness of a builder's account when it contains items on which these discounts are allowed, without their being deducted?" With the exception of the very "green" ones before mentioned, certainly not.

(4) "Whether architects do not invariably insert the names of houses where these discounts are allowed in their specifications, and insist upon the builders dealing with these houses, and whether in these cases the builder does not receive from such houses a smaller discount?" This is a misleading question, to which it is difficult to give a short and plain answer. Seeing that discounts are customary at all wholesale houses, it resolves itself into this: "Do architects specify certain houses for certain goods?" They do, and, further than this, they often include a lump sum on the specification for certain goods, and reserve to themselves the right to select the goods at any warehouse they deem fit. Take the cases of stoves, mantelpieces, locks, gasfittings, paperhangings, &c. If you can show architects how these can be otherwise provided for, you will do them a service for which they will thank you.

You ask, "Does the builder in these cases receive a smaller discount?" That depends upon the nature of the contract. If it is stipulated that the goods shall be allowed for at the gross prices, then the builder receives the discount and considers that fact when

making his estimate. If the contract states that the builder's profit on provisional sums is to be, say, 10 per cent., the item would figure in the account thus:—

Paid for stoves gross	£150 0 0
Deduct 25 per cent. discount	37 10 0
Nett payment	112 10 0
Ten per cent. profit	11 5 0
	123 15 0
Deduct provisional sum	120 0 0
	3 15 0

If by special arrangement with the manufacturer a nett quotation is given, the builder should receive from the manufacturer no discount, but his profit is added thus:—

Paid for locks nett	£112 10 0
Ten per cent. profit	11 5 0
	123 15 0
Deduct provisional sum	120 0 0
	3 15 0

In these two last instances the builder very properly *does* receive less than the trade discount, and the client gets the benefit of the balance.

I have not read the original article which gave rise to this correspondence, but you appear to have stated that "almost invariably the architect is paid a second commission by those whom he employs," and "whenever an architect particularly recommends mantel-pieces or grates, or any other such articles, which are made by some particular firm, it is about fifty to one in favour of his having a personal reason for the suggestion," and you put the questions which I have replied to in support of these assertions, adding, "so long as the trade custom prevails, so long as architects insert in their specifications the names of particular houses, instead of allowing builders to deal in the open market, I for one shall continue to believe that many architects take more care of themselves and their friends than of their employers."

If this be so, it is clear I shall never be able to inspire you with sufficient faith in the profession. But I do not despair. You have a reputation for common sense, and, with the explanations given, you cannot fail to see the want of connection between your facts and inferences. As well say, "so long as newspapers are issued from Fleet Street, I for one shall continue to believe most editors are rogues," or "so long as barristers wear wigs, I for one shall continue to believe most solicitors are in the habit of committing bigamy!"

To say that in a body of men numbering thousands there are none dishonest would be manifestly absurd, whether with reference to architects, lawyers, editors, clergy, or men of any other calling; but I venture to assert that, considering the temptation to which they are exposed, architects are, as a body, as upright and honourable as the men composing any other profession or trade whatsoever.

Your obedient servant,  
C. H.

### MR. BROWNING'S "APOLLO AND DRYOPE."

A CORRESPONDENT of the *Manchester Guardian* says that Mr. Robert Browning, son of the poet, has just finished at his studio, No. 117 Rue Notre Dame des Champs, a considerable work in sculpture. Mr. Browning has hitherto been chiefly known as a painter; but, like other modern artists of this kind, reviving the practice of an earlier date, he has now attempted a considerable work in clay. The subject is *Apollo, in the form of a Serpent, courting the Nymph Dryope*. The story, according to the classical dictionary, if one may dare to avow that authority, is that the nymph, although the daughter of a king, was in the habit of tending her father's flocks, and that the god could find no easier means of approaching her than by assuming the form of the tempter of Eve. As Mr. Browning has realised it, we have before us a vigorous naturalistic study, more than life size, which is in the same spirit of conception and treatment as the *Diana* of Falguière. It is primarily a young girl of the fields absolutely non-classical, with all the splendid beauty of the human form developed by labour and exercise. The non-classical treatment extends particularly to the features, which are full of expression of a kind of wondering scorn. The serpent hangs from the uplifted arm, with its face near the face of the girl, which is thrown back with a movement of repulsion and curiosity combined. The serpent is just as carefully studied from nature as the figure, and it is a very successful treatment of an animal but rarely introduced in sculpture except in a purely conventional way. The great weight of it is somehow suggested by the heavy drooping coils, and there is an attempt to render even the colourations of the skin by light relief in the modelling. The work is to be cast in bronze, but all its essential merits are of course to be seen in the plaster. It is a work of great power, full of feeling for nature, and of a very



refined and true sense of beauty, absolutely unconventional and belonging distinctly to the new school in art. It will remain on view for a short time at Mr. Browning's studio.

### THE ROYAL SCOTTISH ACADEMY.

THE annual meeting of the Royal Scottish Academy was held on the 14th inst., when the office bearers for the ensuing year were elected. Messrs. T. S. Burnett, P. W. Adam, and G. W. Johnstone, were elected associates. The annual report stated that the exhibition of 1883 (the fifty-seventh) was opened on Saturday, February 17, and closed on Saturday, May 12. The number of works exhibited was 1,118—viz. 1,084 paintings in oil and water-colour, and thirty-four works in sculpture, selected out of a total of 2,268 sent for exhibition. The exhibition was composed, with comparatively few exceptions, of the productions of Scottish artists, and its attractiveness was enhanced by a more than usual number of contributions from honorary members. The attendance of visitors was unprecedentedly large.

There has been an average attendance of the members in the library during the past session. The librarian has been engaged during the year carrying on the arrangement and classification of the large and valuable collection of drawings bequeathed to the academy by the late David Laing, LL.D., Honorary Professor of Ancient History to the Royal Scottish Academy, and it is expected that this duty will be accomplished, in terms of Dr. Laing's report, before the issue of next annual report. The books, prints, &c., in the library are in good condition, and catalogued up to date. A number of new works have during the year been added to the library.

The visitors to the Life School report that the session of 1882-83 commenced on November 6, 1882, and ended on July 2, 1883, and included 122 evening and 119 morning meetings. The aggregate evening attendance was 1,841, or an average of fifteen per night, and 1,663 was the aggregate morning attendance, being an average of fourteen per morning. Testimony is borne to the assiduity and the diligent and orderly conduct of the students during the session. It is gratifying to the council to be able to commend the generally high quality of the students' work, which indicates that the school is progressing favourably. After a long and careful scrutiny of the studies and of the works sent in competition for the Stuart prize—the students' work in this year's exhibition having been previously examined with a view to deciding the Keith prize—the prizes were awarded as follows:—

For painting from the life (the Chalmers prize), T. Alison and C. K. Robertson—equal; for the best drawing from the life, C. A. Sellar; for the second best, W. G. Boss; Keith prize, for the best work of a student in this year's exhibition, R. Paton Reid; MacLame Watters medal, C. K. Robertson; Stuart prize, R. Paton Reid; Basso-relievo, from life, J. S. Rhind. Several studies from the life executed in water-colour by T. Scott deserve honourable mention.

The council have again the pleasure of adverting to the kindness of Mr. John Leng, of Kinbrae, who has completed the terms of his engagement to bestow for three years an annual sum as a prize to a student of the life school to enable him to extend his art education by travelling on the Continent. The student selected this year as recipient of Mr. Leng's prize is Mr. J. Michael Brown. Cordial acknowledgments and thanks are due to Mr. Leng for the warm interest and liberality he has thus displayed towards the students of the Academy. During the past year the following, among other additions, have been made to the Academy's collection of works of art, &c., viz.:—

1. *Caleb Balderston's Ruse*. Diploma work of George Hay, Esq., R.S.A. 2. *Far from the Busy World*. Diploma work of John Smart, Esq., R.S.A. 3. *The Cid and the Five Moorish Kings*. Diploma work of W. E. Lockhart, Esq., R.S.A. 4. *Turnip Singlers*. Diploma work of W. D. McKay, Esq., R.S.A. 5. *Portrait of Sir William Fettes Douglas, P.R.S.A.* By George Reid, Esq., R.S.A. Presented by George Reid, Esq., R.S.A. 6. *Ripon Cathedral*—water-colour drawing. By Thomas Girtin. Engraved in "The Rivers of England." Presented by James G. Orchar, Esq., Dundee.

It is with much regret that the council record the death of one of the oldest associates of the Academy, Mungo Burton, which occurred on December 1, 1882. Born at Colinton in 1799, he early displayed a taste for art, his first professional efforts being likenesses in water-colour. His principal works in portraiture, however, were in oil, whilst occasionally he produced figure pictures of Scottish homely life. His amiability and kindness secured for him the general esteem of his professional brethren. The Academy have also within the year suffered a loss of no little import in the demise, on January 12, of George Monro, advocate, Sheriff of Linlithgowshire, who for many years was consulted by the Academy when legal questions arose. His intimate knowledge of the Academy's career, and the warm interest he manifested in its welfare and prosperity, are amply testified in his work, "Scottish Art and National Encouragement." The council have also to report that a blank has been made in the rank of Academi-

cians by the death of Robert Gavin. He was born in Leith in 1827, and at an early age manifested a taste for art. Under Thomas Duncan on the board's school of design he studied assiduously, producing numerous pictures, mainly compositions of landscape and children. In 1868 he went to America, turning his visit to account by delineating several characteristic phases of negro life. After his return to this country—where his stay was but short—he took a journey to the Continent, which resulted in a residence of some years at Tangier, where he evidently found what was congenial to his taste in subject and material. A series of Moorish pictures, many of them of importance, emanated from his pencil at this time, and from his final return in 1880 he continued to paint this class of subject. Mr. Gavin was elected an associate of the Academy in 1855, and attained the rank of Academician in 1879. It was stated in last year's report that a printed catalogue of all the works in art in the possession of the Academy was in preparation, and would shortly be placed in the hands of the members. The council have the pleasure of reporting that this has now been done, and, as anticipated, it has been cordially received.

### THE ROMAN CAMP AT BOROUGHBIDGE.

FOR more than a century the tenth Iter of Antoninus, having regard to his stations, has been a puzzle to archæologists. The identity of the places named in it has never been clearly defined. That Manchester is Mancunium is the one thing certain. As to Glanaventa, Galava, Alone, Galacum, Brematonacum, Coccium, Condate, and Mediolanum there is still scope for investigation. The identification of these stations is now being worked out by some of the learned societies in the North. The identity of Alone, if Alone it be, with Boroughbridge, in Westmoreland, will throw a flood of light on Roman history in Britain. Convinced of its importance, the council of the Cumberland and Westmoreland Antiquarian and Archæological Society voted a substantial sum to enable excavations to be made. This has been done and with what result will presently be shown. The committee which has superintended in a most practical manner these workings consists of the Mayor of Carlisle (Mr. Ferguson), Canons Simpson, Weston, and Ware, and Messrs. Nanson and Titus Wilson. The site of the camp is eminently characteristic of the Romans. It is situated just at the confluence of the Lune and its tributary the Borrow. Its form is that of a parallelogram, the wall from north to south extending 420 feet, and that from east to west 300 feet. Here, as in most cases, the length exceeds the breadth by about one-third. The walls consist of the Silurian stone of the district, together with sand and freestone from Shap Fells and Orion Low Moor. Even with the aid of Roman wagons the labour entailed in the conveyance of these must have been great. From the camp the distance to the first-named spot is five miles, to the second six. Beyond the outer wall traces of ditch and mound, fossa and vallum, may still be seen. The latter, without the western wall, is constructed of earth faced with rubble stone. The original depth of the ditch was 3 feet, the width 5 feet, the vallum being not less than 6 feet high and 8 feet broad. The accumulations have been removed from the tops of the walls, and these in many places have been approached laterally. Upon each of the four sides the foundations of the walls are laid in clay, this also having been brought from a distance. The masonry is still intact, many of the stones being worked in characteristic Roman fashion and inlaid in mortar. The normal thickness of the walls is 7 feet 6 inches. The sites of three of the gateways have already been unearthed, and near two of these have been discovered large stones containing sockets in which the pivots of the gates have turned. The gateways are 6 feet 3 inches across—just sufficiently wide to admit a Roman chariot, and narrow enough to be easily defended. In every Roman encampment are four gateways. Each *porta* was defended by an outwork of earth and stone. Remains of these are here abundant. Vandalism is abroad in Westmoreland, and the posts of one of the gateways have been put into the foundation of a chimney in one of the neighbouring farmhouses. Two others found in the vicinity have been removed to the exact spots where they originally stood. In excavating, quantities of pottery, some exceedingly fine, have been found, and the other day a large piece having an inscription upon it was picked up. This was taken to Carlisle for examination, and may afford some important clue. Inside the camp, and under the surface of the soil, are flues radiating in every direction, and containing large quantities of charcoal. These may either be the remains of ovens or have served the double purpose of heating the baths and warming the tents of the soldiers. Fragments of hypocausts have been dug up, as well as several querns or grinding-mills. A few pieces of money stamped on leather, "sacrificial relics," and a silver coin, supposed to be of Vespasian, have also been found. Outside the camp and beneath the soil of the garden attached to the little inn, the workmen have come upon what appears to be the floor of a beautiful bath, but this discovery will have to be followed up. Tesselated pavements also occur, and these, together with the bath outside the camp, would seem to point to a Roman villa. There can now be no



doubt that Alone belonged to the class of camps known as *castra stativa*. These camps were designed for permanent occupation. According to the Notitia here was stationed a cohort of Nervians. "Tribunus cohortis tertie Nerviorum Alionae manebat." Looking from the north gate of the camp is a low alluvial tract of ground bounded by the Lune and its tributary stream the Borrow. Here probably the Roman soldiers were drilled. The generals standing on the *fossa* could superintend and command the whole situation. The general plan of the camp must have been as follows: There were four gates—Porta Pretoria, Porta Decumana, Porta Dextra, and Porta Sinistra. Facing the first-named gate stood the Pretorium, where resided the general and his staff. This would be fitted out according to the rank of its occupants, and here various traces of luxury usually occur. Opposite to this, and on the north side of the camp, is Porta Decumana. Two streets ran through the camp at right angles, connecting its gates. Via Principalis joined the east and west gates, and was used as a promenade by those in command. Porta Decumana was the street which in this case stood nearest the river and furthest from the enemy. Through it were brought the cattle and the whole of the provisions for the garrison. The intersecting streets naturally divided the camp into four quarters, in which in *strigæ* or rows stood the tents of the soldiers. These were arranged in parallel lines, and between them were stores for arms, baggage, horses, and waggons. Although we have only mention of one cohort being established at Alone, yet Mr. Nicholson infers that at Boroughbridge there was accommodation for six legionary cohorts of 480 men, or a total of 2,800 soldiers. This is supposing the garrison to be wholly composed of infantry, and the camp closely packed with common soldiers. But some space must be allowed for horses, some extra for superior officers, and the number of men must be proportionately reduced. As the excavations proceed it is more than probable that some relic may yet be exhumed which will prove beyond anything that has yet been adduced that the Roman station here is Alone. This is to be hoped, as by it a long-vexed question will be definitely settled.

### THE ANGLO-SAXON SWORD.

TWO lectures have been delivered at the British Museum by Professor Hodgetts, late of Moscow, upon the swords among the Anglo-Saxon antiquities. It was said that the Anglo-Saxon sword was purely Scandinavian in form and general appearance, and he contrasted the weapon with the *gladius*, showing them, however, both to be referable to leaves of plants, the English word blade being cognate with the German *blatt* and Icelandic *blath*. The names of the chief parts of the sword—blade, grip, hilt, tang, ball, edge, and even guard (ward)—were all Scandinavian, like the weapon itself. Having in a very interesting manner traced the history of the sword, pointed out its modification in different ages and by different nations, and related some of the ancient customs in connection with it, he said that the sword was in the Scandinavian system as much a gift of God as letters were, it having been forged by Völundr in Valhalla for Odin. This Völundr or Wayland had come down to them in the Wayland Smith of Scott's "Kenilworth," and the Scandinavian sword of Völundr was repeated in Anglo-Saxon manuscripts, enabling us thereby to identify the older northern weapon with those in the cases at the British Museum. The smaller seax having been referred to at considerable length and shown to have been the prototype of the English dagger of later times, the lecturer next spoke of the adornments of the sword, and the philology of the word "sword." He then alluded to the use of the sword in poetry, mythology, art, and history. Passages from Beowulf were adduced to show how dear the sword was to our ancestors, and that the swords of the various gods of Valhalla were in exact keeping with the mythical value of each divinity, and that the weapons borne by those whose names guard the days of our week were strictly in harmony with the function of each of the patron deities, as representing a phase of human life from the birth of the sun-child on Sunday to the destruction of all things by the advent of Surtur or Satur in devouring flames with a sword of fire at the last day. Having spoken of the sword-belt, Mr. Hodgetts concluded by calling attention to the great debt of gratitude due to the officers of the British Museum for the zeal and judgment with which the national collection had been made and was kept up, and suggested that a hearty vote of thanks should be awarded to them for giving facilities to study those precious relics in so convenient a way. Mr. Ruskin, who was present, observed that Mr. Hodgetts had overthrown some of his most dearly-cherished ideas, but had at the same time opened a new world of light and poetry, from which he hoped to derive much benefit and pleasure. He had conversed on two or three occasions with Mr. Hodgetts on the Odinic world, in which he seemed to be so at home, and he had begun to see that there was much of the glory of poetry in our Saxon myths which we had much neglected and ought to know. He spoke in complimentary terms of the lecture, and of the manner in which the lecturer had dealt with his subject, and warmly approved the vote of thanks to the Museum authorities.

### MR. RUSKIN ON "ASHESTIEL."

IT was lately stated by Lord Reay, when delivering an address at Hawick, that Mr. Ruskin had been on a visit to his lordship. A description of some of the scenes in the neighbourhood of Lord Reay's house appears in the last number of *Fors Clavigera*, a series of letters which has been recommended by Mr. Ruskin. It is satisfactory to find that there is no trace in them of that "decline in the energy of advancing age" or "disabling illness" which Mr. Ruskin accepts as inevitable. In none of the books of his early days are there more exquisite examples of what words can do towards enabling a reader to imagine the appearance of a scene than are found in this small pamphlet. Mr. Ruskin says that he went into the Border Country chiefly to see Ashestiel in Ettrick Forest, which was the house of Walter Scott before he removed to Abbotsford. The following is Mr. Ruskin's description:—

The house of Ashestiel itself is only three or four miles above the junction of Tweed and Ettrick. It has been sorrowfully changed since Sir Walter's death, but the essential make and set of the former building can still be traced. There is more excuse for Scott's flitting to Abbotsford than I had guessed, for *this* house stands, conscious of the river rather than commanding it, on a brow of meadowy bank, falling so steeply to the water that nothing can be seen of it from the windows. Beyond, the pasture land rises steep three or four hundred feet against the northern sky; while behind the house, south and east, the moorlands lift themselves in gradual distance to still greater height, so that virtually neither sunrise nor sunset can be seen from the deep-nested dwelling. A trickle of stream wavers to and fro down to it from the moor through a grove of entirely natural wood—oak, birch, and ash, fantastic and bewildering, but nowhere gloomy or decayed, and carpeted with anemone. Between this wild avenue and the house, the old garden remains as it used to be—large, gracious, and tranquil; its high walls swept round it in a curving line, like a war rampart, following the ground; the fruit trees trained a century since, now with grey trunks a foot wide, flattened to the wall like sheets of crag; the strong bars of their living trellis charged, when I saw them, with clusters of greengage, soft-bloomed into gold and blue; and of orange-pink magnum bonum, and crowds of ponderous pear, countless as leaves. Some open space of grass and path, now all re-designed for modern needs, must always have divided the garden from what was properly the front of the house, where the main entrance is now, between advanced wings, of which only the westward one is of Sir Walter's time; its ground floor being the drawing-room, with his own bedroom, of equal size, above, cheerful and luminous both, enfiling the house-front with their large side windows, which commanded the sweep of Tweed down the valley, and some high masses of Ettrick Forest beyond, this view being now mostly shut off by the opposite wing, added for symmetry! But Sir Walter saw it fair through the morning clouds when he rose, holding himself, nevertheless, altogether regardless of it when once at work. At Ashestiel and Abbotsford alike his work-room is strictly a writing office, what windows they have being designed to admit the needful light, with an extremely narrow vista of the external world. Courtyard at Abbotsford, and bank of young wood beyond; nothing at Ashestiel but the green turf of the opposite fells with the sun on it, if sun there were, and silvery specks of passing sheep. The room itself, Scott's true "memorial" if the Scotch people had heart enough to know him, or remember, is a small parlour on the ground floor of the north side of the house, some twelve feet deep by eleven wide; the single window little more than four feet square, or rather four feet *cube*, above the desk, which is set in the recess of the mossy wall, the light thus entering in front of the writer, and reflected a little from each side. This window is set to the left in the end wall, leaving a breadth of some five feet or a little more on the fireplace side, where now, brought here from Abbotsford, stands the garden chair of the last days. Contentedly, in such space and splendour of domicile, the three great poems were written, "Waverley" begun, and all the make and tenure of his mind confirmed, as it was to remain, or revive, through after time of vanity, trouble, and decay. A small chamber, with a fair world outside: such are the conditions, as far as I know or can gather, of all greatest and best mental work. At heart the monastery cell always; changed sometimes, for special need, into the present cell. But, as I meditate more and more closely what reply I may safely make to the now eagerly-pressed questioning of my faithful scholars, what books I would have them read, I find the first broadly-swept definition may be—books written in the country. None worth spending time on, and few that are quite safe to touch, have been written in towns.

Mr. Ruskin says that Scott was beyond comparison "the greatest intellectual force manifested in Europe since Shakespere," and in his life the lesson is given, with a clearness as sharp as the incision on a Greek vase, that error of intellect and hardening of heart may be measured by denial of spiritual power. Nearly all the grotesque sculpture of the great ages, beginning with the Greek Chimæra, has a nascent form of faith for its impulse. In Giotto and Dante art is always subjected to the true vision.



## NOTES AND COMMENTS.

WE have received several letters inquiring for the answers to the questions in the examination papers which we published last week. It is not, we believe, the practice of the authorities to print answers in technical subjects, and it would need a small volume to work out the papers that were set in this case. But there need be no difficulty should a student wish to ascertain if he has arrived at correct answers. Architects would willingly aid their pupils, and there are books and papers available which will give the information. It will be the student's best plan to work out the questions unassisted. If the answers were printed they would serve as a key, and students would be crammed. The papers are comprehensive, and anyone who has mastered them need not fear the practical part of the Institute examination.

As we anticipated, the uncertainty which accompanied the conditions for the Dublin museum competition has had the effect of diminishing the number of competitors. Only thirty-three designs have been sent in. Although professional work is not at present in a flourishing state, yet the chances of success and fair play were so slight it is not surprising that so few have ventured. In the first competition there were eighty-seven competitors. The diminished number will, of course, make the duties of the assessors far easier, and it is to be hoped that the designs will be thoroughly investigated, and that the decision, if reasonable, will be upheld.

PUBLISHERS find it harder every year to obtain novelties for their Christmas cards. The public demand is for a class of work that is not to be obtained unless from artists who have gained a position, and who, of course, require high prices for sketches. Last year Messrs. RAPHAEL TUCK & SONS commissioned some of the Academicians to prepare designs, and in consequence many other artists have been stimulated to rival them. In the collection of three hundred and fifty cards which Messrs. TUCK have ready there are designs which, if painted on a larger scale, would grace a gallery of pictures, and some of the cheapest cards are gems of art. They are arranged to suit all classes of purchasers, from critics to children, and they are well worthy of preservation.

THE conservatories at the Jardin des Plantes, which received much damage during the bombardment in the Franco-German war, have since been repaired and enlarged by the erection of two new greenhouses, each about 150 feet long, and four smaller glass-houses for raising plants intended for the decoration of the national palaces and public buildings. A large winter garden has also been erected for the display of the most curious specimens of exotic vegetation. All these buildings will be shortly inaugurated, and in connection with the opening a marble slab, bearing the following curious inscription, is to be placed on the façade: "The Garden of Medicinal Plants, founded in Paris by an edict of King LOUIS XIII. on January 3, 1386, and which became the Museum of Natural History on May 23, 1794, was bombarded under the reign of WILLIAM I., King of Prussia, Count VON BISMARCK being Chancellor, by the Prussian army during the night of January 8, 1871. Until then it had been respected by all parties and all powers, national and foreign."

THE railway communication between the different parts of London would have been improved long ago if the parks did not stand in the way. Schemes have been proposed of junction lines running east and west, forming, as it were, a diameter to the Inner Circle, and thus making Oxford Street and the streets north and south more accessible than they are at present. But as a line was not allowed to pass through the park, the schemes were always found to be impracticable. Mr. LEFEVRE has, however, recognised the fact that communication in the metropolis is too important to be impeded by antiquated theories about royal property. He has approved of a project for a line between the Praed Street Station and Westminster, which will run under Hyde Park, the Green Park, and St. James's Park, the terminus being opposite the India Office. It is guaranteed by the company that the surface of the parks will be preserved from injury, that no ventilators will be visible, and that the station buildings will be according to an approved design. But if a line be permissible that shall run north and south through Hyde Park, there is no reason why one should

not run east and west, so as to connect Oxford Street and Piccadilly with lines from the remaining parts of London.

SIR WILLIAM SIEMENS, who died on Monday night, was one of those foreigners who are always welcome in England. He came to this country in 1843 to explain an improved process of electro-plating. Like many other strangers, he expected to find London paved with gold, and, knowing but little of the language, he entered the shop of an undertaker in Finsbury Pavement in search of an agent or promoter. In time he gained an introduction to the late Mr. ELKINGTON, and then found that he had been anticipated in his discoveries. By the kindness of Sir JOSIAH MASON he was enabled to experiment, and succeeded in depositing a certain quantity of silver on a dish-cover, the difficulty being to overcome the crystalline texture of the deposit, and to retain a smooth surface. Afterwards he did much to revolutionise glass and ironworks by the introduction of his regenerative gas furnaces, and his direct process of making cast steel on an open hearth is second only to the Bessemer process. The subject of electric lighting latterly engaged some of his attention, and his system is in use in the British Museum. Sir WILLIAM SIEMENS had received all the honours that are available for a man of science in this country. He was a naturalised subject since 1859.

A MEETING has been held at Chester, under the presidency of the Duke of WESTMINSTER, to take steps to provide a museum in the city for Cheshire and North Wales. The Duke of WESTMINSTER announced on the occasion his intention of presenting the greater part of the site, and His Grace promised also to contribute a sum of 4,000*l.* towards the funds for the erection of a suitable building. It was decided at the meeting that the Chester School of Art should be housed in the building, as also two societies, namely, the Chester Archaeological Society and the Chester Natural Science Society.

SIR G. B. AIRY, the late Astronomer-Royal, has again called attention to the danger arising through the buckling and springing of metal columns, especially those in railway structures. He finds one remarkable example in the Chepstow Bridge, which was designed by BRUNEL on a novel principle, and was also supposed to be an enduring work. One of the columns is now seen to be split with several longitudinal fissures; and in order to avoid an accident it is hooped in a strong but unsightly way. That column may be safe, but Sir G. B. AIRY has doubts about the strength of the remainder. The failure of one column, he considers, is enough to show that, after all, our knowledge of the strength of materials is insufficient. HODGKINSON'S experiments were on a small scale, and we are without experiment on springing and buckling, and especially on bursting—a phenomenon that appears to have been exhibited for the first time at Chepstow.

At Sevres there is an office for the testing of weights and measures, in which the most accurate results can be attained. With the means there provided it is possible, for instance, to ascertain a difference between two kilogram weights so small as 0.00000003 kilogram, or less than  $\frac{1}{300,000,000}$ th part of the whole weight. In the comparison of two mètres, a difference so small as 0.1 micron (0.0001 millimètre, or 0.0000039 inch) could be determined. At the Standards Office in London, which is perhaps as well equipped as the best offices of other Governments, it is at present not possible, with the microscopic apparatus alone, to ascertain differences in kilogram weights smaller than 0.00000005 kilogram, or  $\frac{1}{20,000,000}$ th of the whole quantity weighed; or the difference between two measures of length to less than 0.0000005 inch. The high accuracy obtained at the Sevres Bureau may be partly traced to the mode of construction and arrangement of the comparing rooms. The rooms are lined at the top, bottom, and sides with zinc, the light being admitted through overhead double windows placed at an angle of about 60 degs. There is a space of about two feet between the inner and outer walls, and the rooms have double doors. The inner wall of the rooms is also hollow, so that the rooms may be surrounded by water at a given temperature. The house, which is situated on the north-west slope of the hills of St. Cloud, is entirely built of stone and iron on deep concrete foundations, and is provided with a special double roof. An uniform temperature is maintained in the rooms all the year round.









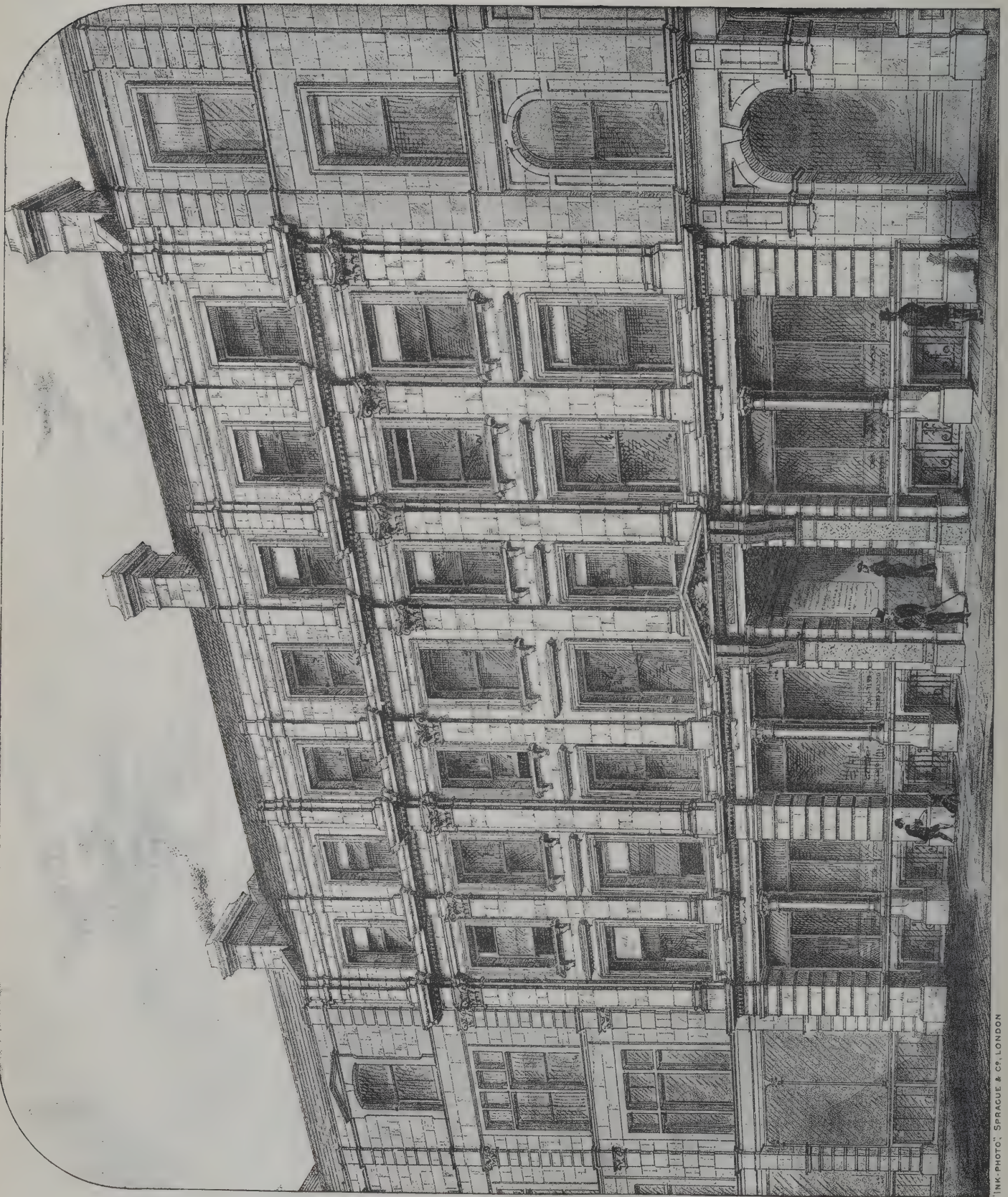
THE KINGS SCHOOL, PETERBOROUGH.  
E. W. FAIRBROTHER, A.R.B.A. ARCHT.







The Architect, Nov<sup>r</sup> 24<sup>th</sup> 1883.



N<sup>o</sup> 4, FENCHURCH AVENUE.  
FOR MESS<sup>rs</sup> COLLS & SONS.  
ALFRED HOWARD, ARCHITECT.

"INK-PHOTO," SPRACUE & CO, LONDON







# BOLLING

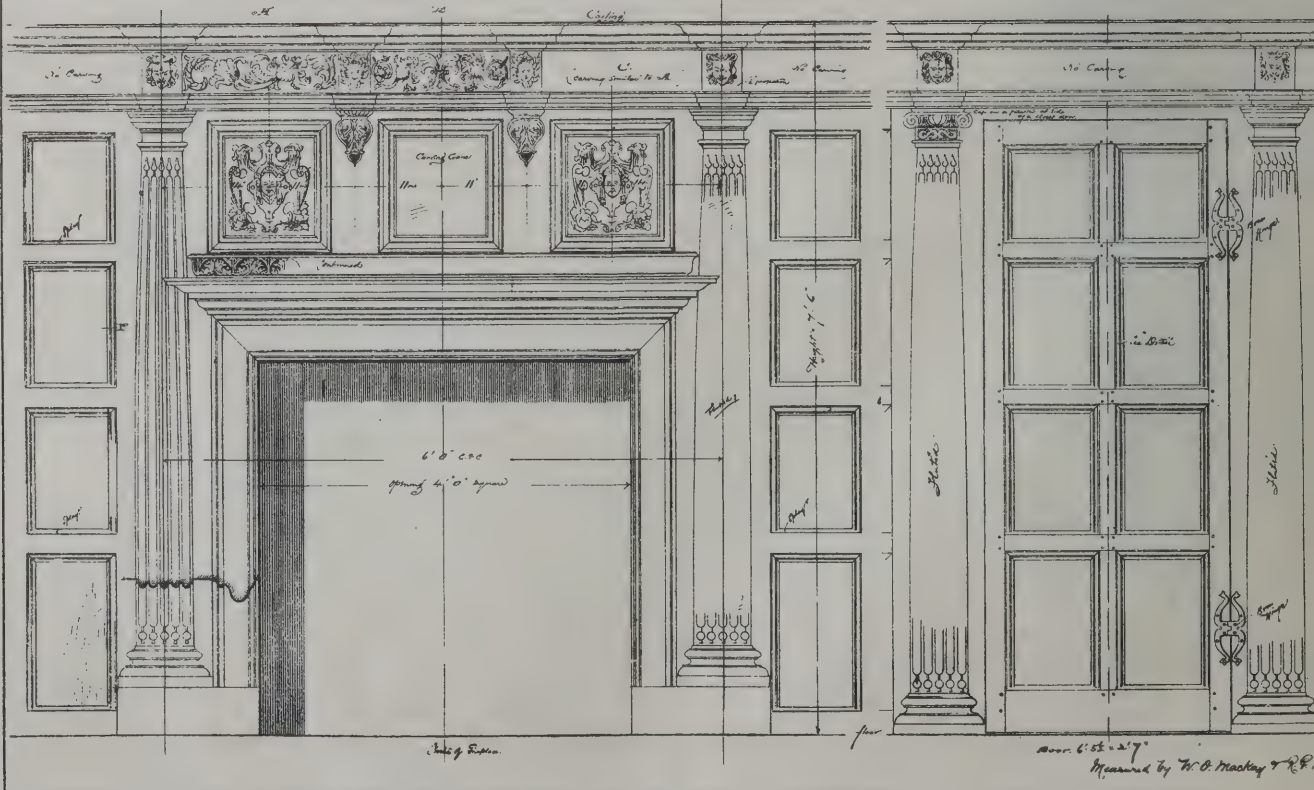
NEAR BR



SOUTH E

— *Fireplace etc. from a House in* —  
— *Cock's Chare, Quayside,* —  
— *Newcastle on Tyne.* —

Scale of Feet



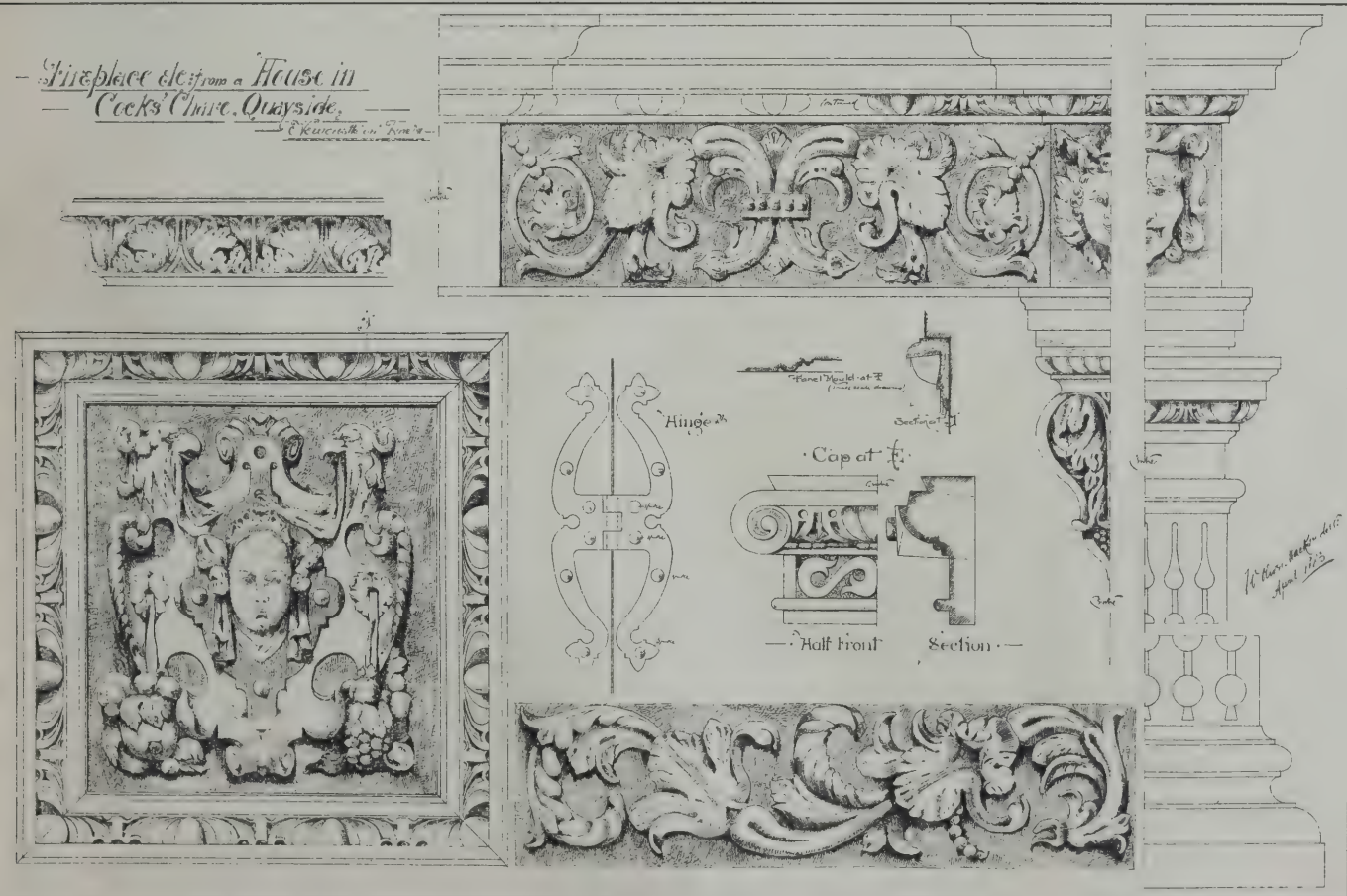


# OLD HALL ORD.



ATION.

SCALE OF FEET











INK-PHOTO, SPRAGUE & CO. LONDON

N<sup>o</sup> 4, FENCHURCH AVENUE.

FOR MESS<sup>rs</sup> COLLS & SONS.

( Elevation towards Churchyard. )

ALFRED HOWARD, ARCHITECT

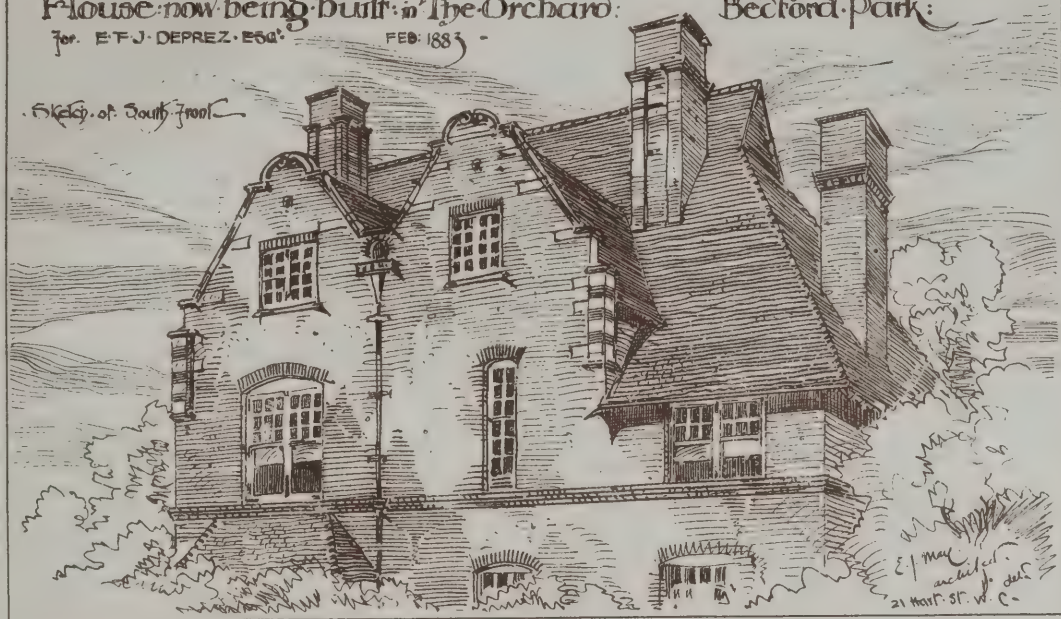




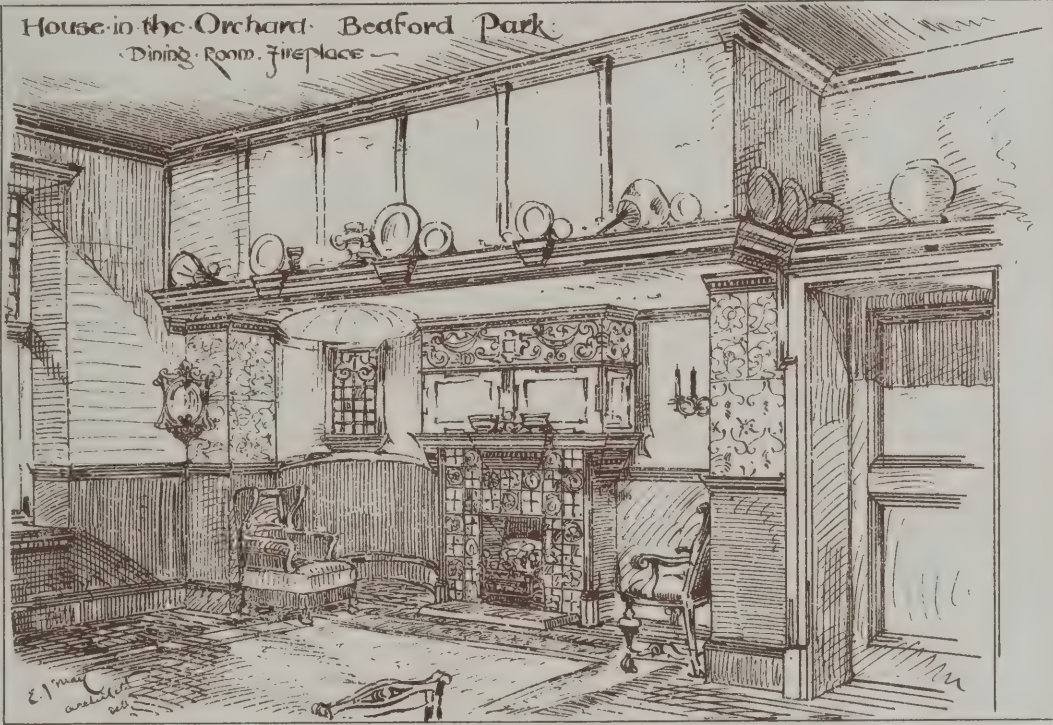


House now being built in The Orchard, Bedford Park:  
for E. F. J. DEPREZ, Esq. FEB. 1883.

Sketch of South front



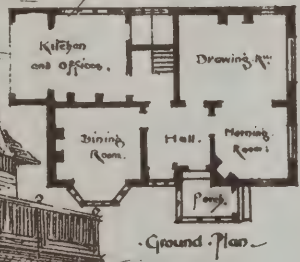
House in the Orchard Bedford Park  
Dining Room fireplace



House for Cap<sup>l</sup> King  
Newton Grove  
Bedford Park

BUILT 1880

View from the South West









## ILLUSTRATIONS.

NO. 4 FENCHURCH AVENUE.

THIS building now in progress is the most recent of four large blocks of offices erected by Messrs. COLLS & SON in Fenchurch Avenue. It stands on land leased from the Carpenters' Company, and was the last vacant site forming part of a comprehensive scheme of improvements projected jointly some few years ago by several of the City companies, for altering and almost entirely rebuilding "The Avenue" and its surroundings, and is a remarkable example of rapid and successful development. The front facing Fenchurch Avenue is executed in Portland stone, with Peterhead granite columns and pilasters, &c., to doorway. (The other elevation which faces the churchyard is executed in white Suffolk bricks, with Portland stone dressings and granite jambs to doorway.)

The interior consists of five storeys in all, and is admirably lighted, a handsome and convenient staircase and hydraulic lift giving access to each floor. The various suites of offices will be arranged and finished in a superior manner according to the requirements of tenants, part of the basement being designed for strong rooms and part for offices. The main corridors and staircases will have Formosa marble dados and marble mosaic floors. The architect is Mr. ALFRED HOWARD, of 6 Martin's Lane, Cannon Street, E.C.

HOUSES AT BEDFORD PARK, CHISWICK.

THE house in The Orchard, here illustrated by an interior and exterior view, contains three sitting-rooms, inner and outer halls, housemaid's pantry, &c., and eight bedrooms, dressing-room, and a bath-room. Local red bricks and Box ground stone have been used externally; and the building was most admirably carried out by Messrs. T. H. ADAMSON & SON, of Turnham Green, for 1,650*l.* The other house was built about three years ago. Mr. E. J. MAY, of 21 Hart Street, Bloomsbury Square, London, was the architect for both houses.

THE KING'S SCHOOL, PETERBOROUGH.

THIS illustration has been reproduced from a water-colour drawing submitted by Mr. E. W. FAREBROTHER, A.R.I.B.A. (of the firm of FAREBROTHER & ROBERTSON, architects, Great Grimsby), in a competition by invitation of the Dean and Chapter of Peterborough.

Accommodation is provided for 140 boys, including 40 boarders, the buildings all being grouped to be capable of extension hereafter, if required. The schools, corridors, and class-rooms are heated by means of GRAHAM & FLEMMING's hot-water system, and the ventilation is of the most improved system. The estimated cost of the entire buildings, including head-master's house and boundary walls, is 7,000*l.*; to be carried out in white Whittlesey bricks, with Ancaster stone dressings, covered in with Westmoreland slates, and COOPER's tile roofing.

BOLLING OLD HALL, NEAR BRADFORD.

WE publish this week a view of the south front of the fine old hall of the TEMPESTS, from a drawing by Mr. WALTER HANSTOCK, A.R.I.B.A., of Batley. The following description of the building is taken from "The History of Bradford," by JOHN JAMES, F.S.A. :—

Bolling Hall is still a stately pile. Its site is very elevated overlooking an extensive tract of country. It has two fronts. The south, and principal one (shown in the illustration), is flanked at each end by a square tower or wing, of much more ancient erection than the rest of the building, and are undoubtedly remains of the ancient residence of the Bollings. The western tower is again of a more remote period than the other, bearing all the marks of having been reared in the days of the earliest Bollings. It is far from being an outrageous conjecture in stating that most likely for the space of five hundred years the town of Bradford has been overlooked by this tower. Its apartments are, notwithstanding the lapse of time, fit for a genteel family, and it may be safely asserted that it is, as a habitable structure, one of the oldest in Yorkshire. That part of the hall on the southern front which is bounded by the tower, seems, from its large embayed windows and the general style of its architecture, to have been a work of the earlier Tempests. Anciently Bolling Hall was surrounded by an extensive park, stocked with deer. From Saxton's Map of Yorkshire, published in 1577, there appears at that time to have been only three parks in the neighbourhood paled round, viz., Bolling and Denholme, and one at Calverley. When Bolling Park was parcelled

out and enclosed, I am unable to state; it was after the manor left the Tempests. Bolling Hall has, to a sensitive and reflecting mind, connected with it many interesting associations. Its history conjures up recollections "rich with the spoils of time," contemplated either in the days of feudalism, when its lords, surrounded by their armed vassals, marshalled on the flat roof of the embattled western tower, watched the approach of a hostile force; or when the entrance-hall (now remaining, with its balcony), in the days of the Tempests was the scene of joyous festivity on the safe return of the heroes of Flodden Field and Jedburgh, and their chieftains.

OAK FIREPLACE, ETC., IN OLD HOUSE, NEWCASTLE-ON-TYNE.

## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE second ordinary meeting of the Institute was held on Monday evening, Mr. Ewan Christian, vice-president, in the chair. A paper was read by Mr. E. C. ROBINS, F.S.A., entitled

## Fittings of Buildings for Applied Science Instruction.

Mr. ROBINS began by remarking that he looked on the present paper as supplementary to that read by him last session on the buildings themselves, but by no means secondary in importance. In an economic view of the question it was necessary that the architect should possess from the very outset a clear perception of the structural provisions involved in the adoption of any particular system of permanent fittings. Mr. Robins said that there was a work of research to be done by the science professors before the constructive faculties of the architect could be properly brought into play; and moreover that a sound economy demanded that the very best method of doing anything from the very beginning should be the rule of those who desired the best results at the least expense. The paper was not intended to include any description of movable apparatus, which did not immediately concern the architect except so far as the position of necessary articles of furniture in a house always affected its planning; thus the position of steam, gas, electric and other machines, shafting, &c., must be prearranged. The paper was intended to take the professor's place, and be an *aide m  moire* to the architect for some of the chief permanent fittings required in chemical, physical and mechanical laboratories; but more especially chemical laboratories. Mr. Robins then went on to describe the more important fittings of physical laboratories, as illustrated by those of the Technical College of Japan, and the Finsbury College, both of which were designed by Professor Ayrton. The solid tables and working benches chiefly required in these laboratories were illustrated; also the glazed enclosures to the same, where the operator stands on a floor in no way connected with that which forms the foundation of the table at which he works, and which he can close and lock up in his absence. In respect to chemical laboratories, he chiefly, with the assistance of Dr. Armstrong, had prepared an elaborate comparative analysis of the fittings of some two dozen chemical laboratories at home and abroad, which were taken in the following order: 1. The working benches and their fittings, illustrated by a comparative table of the different laboratories and a series of large drawings. These fittings were described under the following heads: (a) dimensions and distance apart of benches and students; (b) drawers and cupboards, their shelves and locks; (c) materials used in their construction; (d) upper works, reagent shelves, &c. 2. Draught closets for general use: (a) their position in the laboratories; (b) their dimensions, area, and height; (c) the arrangement of the closing sashes; (d) the material used in their construction; (e) the extraction flues provided; (f) Dr. Armstrong's hood arrangement. 3. Draught closets for special purposes: (a) sulphuretted hydrogen closets; (b) evaporation closets. 4. Demonstration table and fittings. 5. Lecture-room fittings. 6. Preparation-room fittings. 7. Store-room fittings. 8. Classroom fittings. 9. Balance-room and library fittings. 10. Assistant's room. 11. Fittings for rooms for various special purposes: (a) gas analysis room; (b) spectroscopy and polariscope room; (c) photometric room; (d) combustion room; (e) explosion room. 12. Metallurgical laboratory. 13. Special operations room. Mr. Robins gave an exhaustive description of the reasons for and against the various representative examples, which he illustrated with numerous large diagrams drawn to a scale of a quarter full size. The paper concluded with remarks on the fittings required for mechanical laboratories with illustrations, the result of consultation with Professor Perry and others, these fittings being described under the following heads: 1. Lecture-room fittings. 2. Laboratory fittings. 3. Engine-room. 4. Workshops. 5. Melting-room and smithy. 6. Drawing office. 7. Museum. 8. Testing-room. In an appendix to the paper would appear detailed descriptions of the systems of heating and ventilation appropriate to science laboratories, exemplified by those adopted at the following institutions, viz., Finsbury College, Central Institution, Yorkshire College, Merchant Venturers' School, University College



(Dundee), and the Institution of Civil Engineers. In compiling the tables Mr. Robins was indebted to the professors and architects of the various buildings referred to for the information given, and to whom his thanks for the same were due, and, though some of the tables were not yet complete, they would be made so before the paper was issued.

Mr. WATERHOUSE, A.R.A., proposed a vote of thanks to Mr. Robins for his paper, in which, he said, an extraordinary amount of information had been collected for future use. His own name had been mentioned more than once in the course of the paper, so that he was glad to have the opportunity of correcting the impression that he had done anything in the way of designing such fittings, for he had simply followed the clear and explicit directions furnished to him; and in particular, he mentioned, by Dr. Roscoe and Dr. Thorpe. When doctors differed, difficulties increased, so that it was of great importance to know whom they had to serve before beginning the work. At times it would happen that it was impossible to know who was going to be the master before the plans were drawn up, and therefore he thought Mr. Robins's paper an important one, as it got over this difficulty. Mr. Waterhouse then observed that among the important questions to be considered, one of the most important was that of light, and instanced the arrangement at the Manchester College, where the light was so arranged that it came down between the students' tables, so that none of the students could stand in their own light. It was, however, often difficult to arrange matters, as the professor would not unfrequently insist on having things arranged in his own way. What was considered rather a feature at the Manchester College was the extra depth in the recess for the toes in the students' tables. Professor Armstrong's arrangement of the draught-places was novel, and if it proved a success would be a great step in the right direction.

Professor CAREY FOSTER said that the requirements of physical laboratories were more difficult to treat than those of chemical laboratories, as the operations were of so much more varied a character. The routine in the students' laboratory was chiefly confined to analytical operations, which did not require a large amount of space, and the apparatus required was much the same for all students. But in physical laboratories light, electricity, heat, and sound were all different subjects that required special arrangements, in order that the operations might be carried out to the best advantage; and very often elementary operations, such as might be put into the hands of a beginner, would require a great deal of room. One essential requirement was to insure such steadiness of support as would be independent of any shaking due to passage outside the building or walking inside the building itself. He was interested in knowing how this steadiness could be obtained when the ground was in tremor. The idea had occurred to him whether the system of floating support would answer, and he had thought of making the experiment. Mr. Foster concluded by a reference to the Birkbeck laboratory, the earliest student laboratory in the country, built, he believed, in 1845 or thereabouts, and which he considered had certainly been a good attempt.

Dr. THORP, of the Yorkshire College, Leeds, said he regretted the paper had not been in existence some eighteen months earlier, as it would have saved them much trouble in carrying out the college building. Comparative steadiness, he said, had been secured in buildings not originally erected for laboratory purposes by introducing heavy wood beams under the floors to bear the apparatus. One such method had been brought to his notice by Professor Andrews, of Queen's College, Belfast. Here the operator when walking over the floor only gave rise to the smallest possible tremor in the apparatus placed above the beams. His experience was that far less sink accommodation sufficed than was usually provided. It was a waste of space to furnish a sink for every table, and he considered a tolerably large rectangular sink would suffice for four persons. In most of the large towns the water pressure was pretty high, and in some laboratories care was taken to reduce the pressure, but disadvantages attended this. In Munich the difficulty was got over in an ingenious way without reducing the pressure. The sinks were shaped obliquely, so that when the water was projected into the sink it met the oblique side, and no water was spilt or splashed over the place. It might be thought that they were inclined to be faddy in many small matters; but they found from experience that if the air was kept sweet it conduced greatly to the amount of work they could turn out. The number of hours they could work in such a laboratory as at Bonn was greater than here, where numberless impurities and fumes, emitted in quantities that were trivial, at the end of the day rendered the laboratory unbearable owing to the noisome vapours. The system of draught-niches in the buttresses of the Yorkshire College had, he said, been devised after considerable thought and consultation with chemists.

Mr. SLATER seconded the vote of thanks, and spoke of the gratification it was to find such subjects brought before the Institute. Physical science was, he said, becoming more and more part of everyday life. They might not all be called on to design chemical or physical laboratories, but it was now found that in many industries it was necessary to have skilled assistants, and many firms had on their staff a skilled chemist, &c., and a proper place on the premises for laboratory operations, such as fifty years ago would have had to be done outside. On the subject of vibra-

tion, Mr. Slater said that in addition to earth tremors from railways, &c., if electric light was as it was said about to come into general use in the near future, the vibration caused by a number of stations for dynamo machines would have to be considered, and to prevent causing a nuisance to the neighbours the vibration would have to be confined within the four walls of the buildings that held the machines. Speaking of the use of fans to exhaust air, he remarked on the tendency of the edges of the blades to get worn and lose their efficiency, and this was a serious consideration where deleterious gases had to be exhausted. He strongly recommended an inspection of an apparatus he had seen in the Midland counties, an American invention he believed, called the Baker patent rotary pressure blower. It was not a fan, but consisted mainly of a series of disks revolving one upon another, and the amount of air passed could be raised from some hundreds of cubic feet to many thousand a minute, and where gas had to be exhausted it could be done without passing through the machine at all.

Professor ARMSTRONG said that looking at the immense number of buildings now erected, he considered we were remarkably ignorant in the matter of laboratory ventilation. He thought it would be of great advantage if some one would follow Mr. Robins with a description of school laboratories, the examples brought forward by Mr. Robins being all high-class ones.

The vote of thanks was then passed to Mr. Robins, and the discussion was adjourned to December 3.

## NORMAN BUILDINGS IN APULIA.

IN the *Guardian* of this week there is another article by Dr. Freeman, which contains the following description of some Norman buildings in Italy: The attractions of Trani are irresistible; a bell-tower rising as proudly over the waves as that of Spalato itself would force us to halt even if we knew nothing before of what church and city has to show us. The metropolitan church of Trani is certainly one of the very noblest examples of that singular mixture of Norman and more strictly Italian forms—not without a touch both of the Greek and the Saracen—which is the characteristic style of this region, the natural result of its political history. Strange, but striking in the extreme, is the effect of the east end of this church rising close above the sea; far more truly admirable is the effect of the inside, where the coupled columns of the Saracen have been boldly taught to act as the piers of the great arcades, and to bear up above them a massive triforium which by itself would make us think ourselves in Normandy or England. All the churches of this district have a good deal of their strength underground, and the under church of Trani is worthy of the building which it supports. The smaller church, All Saints, a charming little basilica with a portico of singular grace, as also several good pieces of domestic architecture, and the general effect of the tower, skirted with its dark arcades, all join to make Trani a place which cannot be passed by, though no august form calls on us, as at Barletta, to tarry to pay Cæsar his due homage. But Trani has found something to be said for itself both by pen and by pencil in quite other company. An accident of later times gave it a right to rank, like Brindisi itself, among the Subject and Neighbour Lands of Venice. And Trani has peculiarities of its own. The main features of the style may be studied elsewhere. We long to see Barletta, to tarry to pay Cæsar his due. We long to stop at Bisceglia and Molfetta, of which we read attractive notices; but again we must pick and choose, and Bitonto is the only place on which we can qualify ourselves to speak at all at large, till we come to the head of the whole region at Bari.

Bitonto shares a station with San Spirito, but it lies further away from the railway, and that on the inland side, than most of the towns along this line. Its main interest is found in its cathedral church, which in some points prepares us for the buildings of Bari. First of all in point of wonder, though latest in point of date, is the treatment which it has undergone at the hands of modern improvers. A dim remembrance comes to us that we saw something of the same kind in the Dominican church at Perugia; otherwise we ask in amazement why any man should think it an improvement to cut off the whole upper part of a church as seen inside by thrusting in a roof a great deal lower than the original one, and thereby leaving the upper stages outside to stand up in the air, serving no kind of purpose. Yet this has been done both at Bitonto and at Bari. Yet perchance the improvers of modern times might retort on the original architects, and ask why, when they had made three apses at the east end, they presently built up a wall to hide them. This is the arrangement both at Bitonto and in the two great churches of Bari. The notion of Normans working in Italy would almost seem to have been to make an Italian front at one end, and something approaching to a Norman front at the other end. Thus the church of Bitonto has an excellent west front of Italian outline, with details more Italian than Norman, and with the characteristic round window evidently designed from the beginning, though the one which is actually there must be of later date. And there either has been or has



been meant to be a portico over the lower stage of the west front—a thoroughly Italian notion. But the east end takes almost the form of a Norman west front; a Norman founder, it would seem, was not happy unless he could somewhere or other get two towers with an ornamented wall between them. To this end the apses are sacrificed. Instead of the three curved projections which form the main features of so many Italian, German, and indeed Norman east ends, the whole east end is flat. The side apses are disguised by towers, one only of which is carried up to any height, while the great apse is hidden by the wall between the towers. Herein is the difference between Bitonto and Trani. At Trani there are no eastern towers, and the apses, though of amazing external height, and no less amazing slightness of projection, are still real apses with a real curve. At Bitonto no one could know from the outside that there were any apses at all. As the ordinary ranges of arcades and windows are thus made impossible, the architect, like an English architect some generations later, threw his strength into a single east window, and certainly made one as large and as rich as was possible before the invention of tracery. An elaborate round-headed opening is covered with rich devices, and has wonderful monsters to bear up its side-shafts. This, too, is to be seen at Trani, and we shall come again to other examples at Bari. There is something very strange in these attempts to reconcile the ideas of Normandy and of Italy in one building. But in these flat east ends the result is that we get something which is certainly neither Italian nor Norman, and which can hardly be approved according to any law of either reality or beauty.

The same spirit of compromise goes on in other parts. The endless columns of the under church supply a rich study of capitals, largely of the grotesque kind. Men, monkeys, the original ram's horn, leaves, the Imperial eagle—better suited for the purpose than anything else—all do duty as volutes. The columns in the upper church, too, give another rich collection of various kinds of human, animal, and vegetable forms. But here a soberer spirit reigns; though perhaps no one capital is strictly classical, yet the grotesque does not reign as it does below. Three arches from columns, a solid block, three more arches from columns, make up the nave. Over these Italian elements Norman taste set a triforium; modern taste has hidden the clerestory. Outside the Italian has his way in the rich, open arcades of the parapets and in the windows of various forms, filled, some of them, with that kind of pierced tracery which is neither Italian nor Norman, but distinctively Oriental, and which look as if they had come—as they possibly may have come—from a mosque.

Altogether, there is something singularly interesting in this mixture of styles—more strictly, this mixture of two varieties of the same style, for Italian and Norman Romanesque are, after all, members of one great artistic family. Nothing of the kind happened in Sicily, where the Norman kings simply set native craftsmen, Greek and Saracen, to build for them after their several native fashions. Here, in a land where Greek and Latin elements were striving for mastery, where the Saracen was a mere occasional visitor, the Norman brought in the ideas of his own land to make a new element. But, if nothing like this happened in Sicily, something a little like it did happen in England. There is no doubt that Norman architecture was influenced, though very slightly, by the earlier native style of England, a rude imitation of Italian models. That Norman architecture in Apulia should be far more deeply influenced by the Italian models themselves was but carrying out the same general process, as was only natural, in a far greater degree.

#### EDINBURGH ARCHITECTURAL ASSOCIATION.

THE usual fortnightly meeting of this Association was held on the 14th inst., the president, Mr. David MacGibbon, in the chair. Before commencing the business of the evening, the president alluded to the great loss the association had sustained in the recent death of Mr. Lessels, one of the oldest and most esteemed of its members. Although Mr. Lessels had not been very long an enrolled member, he had for years taken a great interest in the proceedings of the Association, and they would all recollect the cordial and enthusiastic manner in which he promoted the architectural exhibition of last winter, and how greatly his exertions tended to its success. He not only contributed many beautiful works from his own hands and from his own collection, but also most successfully exerted his influence amongst his friends in securing many important contributions. They were also greatly indebted to him for much valuable advice, which his long experience enabled him to give them. Mr. Lessels' death would create a blank not only in the Association, but also in the architectural profession and in the city, for he was most cordially esteemed by all who knew him, not only as an eminent architect, but as a true and upright citizen. During the long period of about forty years in which he had practised in Edinburgh, his ability, together with his perfect honesty and fearless impartiality, had gradually raised him, in spite of many adverse circumstances, to a high position amongst his fellow citizens. This was not the time to

allude to Mr. Lessels' many important professional and artistic works, but he trusted an opportunity would be given to the public of seeing these as a whole. He was satisfied that, much as Mr. Lessels was esteemed, his modesty prevented his great merits as an architect and as an artist from being fully recognised and appreciated. He believed that an exhibition of all his works would be very satisfactory both to the profession and the public, and would have the effect of still further raising his memory in the estimation of his fellow-citizens. He now proposed that they record in their minutes their deep regret at the loss of so valued and respected a member, and that it be remitted to the council to communicate with Mr. Lessels' family to ascertain whether an exhibition of his architectural and artistic works would meet with their approval; and, if so, offer the assistance of the Association in considering what steps should be taken in the matter. Professor Baldwin Brown then proceeded to deliver his lecture on "The Basilica and Domed Church of the Fourth to the Ninth Centuries." He began by describing the various constructive forms, such as the arch, the vault, and the cupola, which were in use in the Roman world at the time of the rise of Christian architecture. Remarking that the development of the rectangular stone vault belonged rather to the Romanesque than to early Christian times, he traced the steps by which the architects of the early centuries perfected the construction of the cupola, and combined it with other features to suit the exigencies of Christian worship. Examples of the two great classes of early Christian buildings, the basilicas and the domed churches, were then reviewed, and their main characteristics explained by the aid of photographs and drawings. A brief sketch of the history of Byzantine architecture, and of its influence in the west, concluded the lecture.

#### THE VIKING'S TOMB.

AN account has been given by Mr. James Rutland (the secretary of the Berks Archæological Society) of the results of the excavation of the tumulus in Taplow churchyard.

After four days' work the first indication of an interment was the finding, at a depth of 20 feet from the top of the mound, a quantity of gold fringe,  $\frac{3}{8}$  inch and  $\frac{1}{4}$  inch wide, lying in an oblique direction across the grave. The fringe was about 2 yards in length, and doubtless formed the embroidery to a cloak or mantle which was fastened at the shoulder by a large gold fibula or buckle, of exquisite design and workmanship, and jewelled with garnets, which lay close to the fringe. It is in the most perfect state of preservation, measures 4 inches by 2, and weighs 4 ounces. This brooch-buckle is of the cross or Tau-shaped form, and Mr. Wright in his "Celt, Roman, and Saxon," considers the round buckle as peculiar to the Jutes, and the cross-shaped to the Engle. About 20 inches from it were two smaller gold buckles, measuring  $4\frac{3}{4}$  inches by  $1\frac{1}{2}$  inch, and of similar workmanship. Towards the centre of the grave, the dimensions of which were 12 feet by 8 feet, were an iron double-edged sword, 30 inches long and  $2\frac{1}{2}$  inches wide, in a wooden scabbard; two iron spears, one 26 inches in length, including its socket, and another about 10 inches long; two knives (sceax) in wooden sheaths; and an iron ring  $4\frac{1}{2}$  inches in diameter. In the north-east corner were two iron umbos or bosses of war shields, each 5 inches wide and  $3\frac{1}{2}$  inches high. On the south side of the fibula was a magnificent bronze vessel or vase, 12 inches in height and 16 inches in diameter, the dish of which is twelve-sided, with knobs at the angles, and with a massive drop-handle of Roman design, and probably of Roman workmanship, on either side; the stand which formed its base contained a quantity of carbonate of lead, probably to give it solidity. Underneath it was a small drinking-horn, with silver-gilt terminals and bands. Near it lay the fragments of a glass vase; and also a bucket 12 inches in diameter, with iron frames and ash-staves, strengthened on the outside by bronze bands, with horse-shoe ornamentation and radiating points stamped upon it.

In the centre were the crushed remains of a large bucket or tub, 24 inches in diameter, with iron frame, but covered with plain bronze. When first it was uncovered, its circular form led to the impression that it was a bronze shield, but on more careful examination of the fragments the true character of the vessel became apparent. It contained the fragments of two glass drinking-cups, each 11 inches high and 4 inches wide at the mouth, and with ten pear-shaped drop ornaments in alternative lines round the body of the cup. The glass is thin and of a greenish tint, and is ornamented round its upper part with fine parallel lines. In it were also two large drinking-horns, with massive silver-gilt terminals and bands; two silver bands, richly embossed, which may have been ornaments to the horns or lips of drinking-vessels, as they seem to have been lined with thin wood of a very peculiar cork-like texture; and two large silver-gilt rings,  $4\frac{1}{2}$  inches in diameter and 3 inches wide, with deeply radiated edges of twelve points. These latter might be, if not armlets, either the rims of the drinking-horns or those of wooden beer-cups. On the north of this mass was another bucket of similar dimensions and character to that on the south side of the fibula.

To the west of the large vessels—that is, at the foot of the



grave—were the fragments of another glass drinking-cup and of a small drinking-horn, similar to those already described; a silver gilt ornament of crescent shape, about 6 inches long; and, lastly, about thirty circular hollow rings of ivory, about one inch high, the ends of which were closed by ivory discs united by a silver pin. These may have been draughtsmen or counters for a game. There were very few fragments of bone, but on a line about north-west and south-east, and therefore parallel to the sword, were fragments of vetebræ, much broken and decayed. Throughout the body of the mound were numerous well-wrought flakes, scrapers, hammer-stones, and cores of flint, and fragments of pottery of possibly Celtic and certainly Roman, Romano-British, and Saxon character. The hill-top must have been an ancient occupation site far back into prehistoric time. It is gratifying to know that Mr. A. W. Franks, F.R.S., F.S.A., Keeper of Antiquities at the British Museum, who has inspected the relics, holds a very high opinion as to their archæological value; and that, at his suggestion, and with the concurrence of the local authorities, they are shortly to be added to the national collection.

### GLASGOW PHILOSOPHICAL SOCIETY.

THE opening meeting of the Architectural Section of the Philosophical Society of Glasgow was held on Monday, Mr. James Sellars, the president, in the chair.

Mr. Sellars, in opening the proceedings, congratulated the section on the auspicious opening, and the fact that they were likely to have an interesting and instructive year. The paper to be read at next meeting by Mr. Honeyman on better dwellings for the working classes was one that at present was agitating the whole country, the highest in the land taking an interest in it. Mr. Honeyman's paper was to deal with free spaces in densely populated districts, a subject which had a direct bearing on the important question of such dwellings as he had referred to. At the conclusion of his address last year the speaker referred to that subject, and it was his intention, unless it was whipped dry by that time, to return to it and endeavour to put it in some practical shape, and offer some suggestions with regard to it. Another matter to which he alluded at the close of last year was the Police Bill, when he advocated its division into two parts, or rather the withdrawal from it of all building regulations. While he was of opinion that the building regulations would be better if separated from a Police Bill and made the subject of a special Act, it did not appear to him that that would involve any material alteration in the constitution of the Dean of Guild Court. That body would have plenty of work in seeing that the provisions of the Act were properly carried out. They would practically be in the position of the Metropolitan Board of Works, who, with the assistance of an advising surveyor, assisted by district surveyors, see to the provisions of the London Building Act being properly attended to. He had noticed that the late Lord-Provost, who had taken a deep interest in the Bill from the beginning, had, if he was not mistaken, come to be in favour of the separation. In these circumstances he hoped that the idea would be carried out. The Glasgow Institute of Architects were endeavouring to frame a rough draft of such a Bill, which was intended to be laid before the Lord-Advocate, and there was a likelihood that to some extent their views would have full consideration.

Mr. John Hay read a paper on "The Application and Comparative Value of the different kinds of Air-warming Apparatus." In the course of his paper he pointed out that to insure more genuine interest in air-warming, increased attention should be given to certain laws as the basis of all legitimate improvement—chiefly that as to the distinction between radiated heat and heated air; that the warm air in any building if in sufficient quantity and quality would naturally absorb the full quantity of moisture it could hold in solution without the need of special evaporation; that the atmosphere was heated only by contact with a warm substance; that iron was generally the material used when artificial heat was wanted, and that iron was a slow conductor of heat; that upon the distinct recognition of that fact lay the whole question of the value of the different methods of air-warming; that the quality of the atmosphere heated by the best gill-stove was equal to that from the best hot-water apparatus.

Mr. Douglas agreed with Mr. Hay as to the great value of the gill-stove, and in his opinion it was most unfortunate that it had gone out of fashion, and that there was a great running after hot-water pipes. He considered that the gill-stove acted most admirably in many of the lofty cathedrals in England, just from the principle of the diffusion of gases—the air being warmed rose up and caused the cold air to come down. In cases where hot-water pipes were used failure had often occurred through trusting to radiation, for unless means were taken to get the air to pass over the pipes, they would be almost useless.

Mr. Walter Macfarlane said that it was almost impossible to get a uniform temperature in a large building, because heat could not be bottled up but must travel. Wherever there was a heating apparatus, there ought to be a chamber in the roof of every build-

ing where the foul air was drawn out, and at the same time a certain amount of fresh air let in.

After some further discussion,

Mr. Hay replied and combated the statement of Mr. Macfarlane. He said he had had to do with between 300 and 400 churches, and with the exception of one at an odd time, he had always given his written guarantee that he would give 55 degrees, diffused alike over all parts, and that, too, obtainable in the coldest weather. As an instance he mentioned Montrose parish church, where the heat at the close of the forenoon service was found to be 60 degrees in the body of the church, as well as in the highest part.

On the motion of the chairman, a hearty vote of thanks was awarded to Mr. Hay for his paper.

### PROPOSED WORKS IN LONDON.

THE Metropolitan Board of Works have given notice of their intention to apply in the ensuing session of Parliament for an Act for further amending or repealing the Metropolitan District Railway Act, 1881, and to compel the railway company or authorise the board to close the following openings made by the company under the authority of section 12 of the Act mentioned: In Victoria Street, near the company's Victoria Station; on the roadway of the Victoria Embankment, opposite Montague House; in the gardens of the Victoria Embankment—1, near the east end of Whitehall Place; 2, between Charing Cross and Waterloo Bridges; 3, near and to the west of the Temple Station; and 4, between the Temple Station and the Temple Gardens. The Act will make provision for the payment by the board or the company of the expenses incurred in the making and closing of the openings, and the removal of all buildings or erections connected with them.

By another Bill the board will ask for powers to enable them to provide a new means of communication across the Thames. The works comprise a road commencing on the northern side of the river at a point in the road known as Upper East Smithfield, near the gateway forming the entrance to the London Docks, continuing thence partly on and partly near the side of Nightingale Lane, passing under the river by a tunnel (below mentioned) and terminating in Bermondsey at or near the intersection of Abbey Street and Dockhead; a road commencing by a junction with the last-mentioned road, in Dockhead, and terminating near the Dockhead Distillery by a junction with Tanner, near its junction with New Street; the widening of this street to its junction with Fair Street; a tunnel for carriage and general traffic, by means of which the first-mentioned road will be carried across the river, commencing at the junction of Burr Street with Nightingale Lane, and terminating in Dockhead; a tunnel for foot traffic in connection with that just described; a roadway ("C") on the northern side of the river, commencing in Lower East Smithfield, at its junction with Nightingale Lane, continuing thence to and over the tunnel first described at its commencement, and thence to and terminating in Upper East Smithfield at or near its junction with Dock Street; a roadway commencing by a junction with the road "C," at or near the northern corner of the Red Lion Brewery, and terminating by a junction with Upper East Smithfield, at or near the entrance to the London Docks. Powers are asked to enable the board to construct and maintain all necessary and convenient lifts, machinery and incidental works, "and to provide by means of horses, mechanical, or other power, aids for traffic on the inclines of the said roads, tunnels, or subways." By the same Bill the board will ask for authority to enable them to maintain and work a ferry across the river at Woolwich, and a ferry between the Isle of Dogs and Greenwich; to widen Nile Street, Woolwich, from its junction with High Street to the river; to alter the situation of the new Battersea Bridge; to widen Battersea Bridge Road; to remove the old Battersea Bridge for the purpose of constructing the new bridge; to enable the board, for the purposes of any of the works authorised by the Act, to alter and interfere with the bed and foreshore of the Thames, &c.; and to purchase, by compulsion or agreement, any property required.

In a third notice the board intimate their intention of applying for leave to introduce a Bill to extend the powers of section 144 of the Metropolis Management Act, 1855, and to authorise the board "to promote or oppose in Parliament any Bill or Bills relating to the supply of water in or near the metropolis, or relating to any company having powers of such supply, or to all or any part of the undertakings of any such company, and to prosecute or defend any legal proceedings which the board may deem necessary or proper for the public benefit of the inhabitants of the metropolis having reference to the supply of water or to any such company."

Authority will be asked by another Bill to alter so much of the Metropolitan Fire Brigade Act, 1865, as relates to the contributions towards the expense of carrying the Act into effect, which are to be paid by insurance companies insuring from fire property in the metropolis, and to fix the companies' contributions on a new basis. Powers are also sought to alter the provisions of section 22 of the Board's Loans Act, 1869, which prohibits them from estimating



as required for the general purposes of the Fire Brigade Act, 1865, any larger sum than would be produced by a rate of  $\frac{1}{4}$ d. in the pound on the gross value of the property assessed to the Metropolitan Consolidated Rate.

The board further intend in another application to ask for authority enabling them to extend their powers under the Metropolitan Street Improvements Act, 1877, for the compulsory purchase of lands for improvements authorised by this Act, but not completed; to enable the board to make new streets from Kentish Town Road to Great College Street, St. Pancras; connecting Cotton Street with Preston's Road, All Saints, Poplar; and an extension of Great Guildford Street to Bankside, Southwark; to purchase Sot's Hole, Plumstead, and two fir plantations on Hampstead Heath; to confer further powers on the board as to Hackney Commons, and to vest them absolutely in the board; to alter section 33 of the Metropolitan Street Improvements Act, 1877, so far as relates to the new street (authorised by this Act) from Southwark Bridge Road across Queen Street and Duke Street, to Mint Street and Blackman Street; and to repeal or modify section 9 of the South-Eastern Railway (New Lines and Widening) Act, 1882, and to define and fix the respective positions of railways Nos. 1 and 2 authorised by that Act, or to require the railway company to define the position of their intended railway so far as it will affect the street referred to.

### ARTISANS' DWELLINGS.

A PARLIAMENTARY paper has been issued, giving a return from the London Commissioners of Sewers, from the Metropolitan Board of Works, and from such urban sanitary authorities as have received official representations under the Artisans' Dwellings Act, of the number of official representations made to them of the number, size, and locality of the areas to which they relate, &c., and similar returns from Ireland and Scotland. The Commissioners of Sewers of the City of London report twenty-two areas as having been either dealt with, or as being dealt with; while the Metropolitan Board of Works give full details regarding thirty-three areas, with the addendum that "the moneys borrowed for the purpose of the Act amount in the aggregate to 1,360,500*l.*" Birmingham, with a population of 400,774, is entered as having had two official representations made to the Urban Sanitary Authority under the Act—one on October 1, 1875, in regard to an area of 43½ acres in the Market Hall Ward; and another on November 9, 1875, in regard to 49½ acres in St. Mary's and St. Stephen's Ward. The improvement scheme affecting these two areas was adopted on November 10, 1875, and the confirming Act having been since passed, the scheme is now being carried out. The amount of money borrowed was 1,500,000*l.*, and the estimated cost is 1,344,000*l.*, with a net amount of 550,000*l.* Walsall, with a population of 58,795, has made one official representation on September 5, 1876, in respect of 2½ acres in Townsend Bank and neighbourhood. A scheme was adopted on October 30, 1876, and the local authority have now purchased the whole of the property comprised within the area of the scheme, and have demolished all the whole buildings, and have resold or leased the greater portion of the land available for resale. The amount borrowed under the Act is 15,000*l.*, the estimated cost 17,000*l.*, and the net estimated cost 10,510*l.* Wolverhampton, with a population of 75,766, has made one official representation on February 29, 1876, in respect of 11½ acres near the centre of the town. Two schemes were adopted—on July 4, 1876, and August 7, 1876—and the whole of the property referred to in the scheme has been purchased, and some part of it resold. Several new streets have been made, and others improved. The amount borrowed under the Act was 207,350*l.*, and the estimated total cost of the work is 162,307*l.*, and the net cost 45,307*l.* At Derby the estimated cost is 37,774*l.*; at Devonport, 3,500*l.*; at Liverpool, 62,254*l.*; at Newcastle-on-Tyne, 18,300*l.*; at Norwich, 20,800*l.*; at Nottingham, 35,500*l.*; and at Swansea, 11,044*l.* The Act is under consideration at Brighton, Dover, Exeter, Hastings, Nottingham, and Sheffield; while at Jarrow-over-Darwen and Whitehaven the Act has been made applicable by local Acts. In Ireland the Act has been applied to Belfast, Dublin, and Cork, but not to Limerick or Londonderry. The part of the paper referring to Scotland notes the fact that the Scottish Act applies only to such Royal and Parliamentary burghs as had a population of 25,000 or upwards at last census. The town clerk of Edinburgh states that "he has no return to make," the city having an Act of its own. In Glasgow, also, it is stated, the Act has not been put in operation, the Corporation having obtained a Local Improvement Act in 1866, "under which large areas occupied by the artisan and labouring population have been entirely reconstructed and improved." The local authority of Dundee "has received no official representations under the Act." The Police Commissioners obtained a special Improvement Act of their own, now consolidated with other Acts, and entitled the "Dundee Police and Improvement Consolidation Act, 1882," and they have already demolished portions of the most densely-populated districts in the ancient burgh of Dundee, and reconstructed them." Aberdeen

reports—"No official representation under the Act;" Paisley, that "the Act has not been put in force; there is a Local Improvement Act, which was passed in 1877;" and Perth, that "no official representations under the Act have been received, and the Act has not been adopted." From Greenock and Leith only there are returns. In the case of the former, official representation was made on March 20, 1876, and related to a total area of about 2½ acres in the low-lying and central part of the town, between the Vennel on the west and the East Quay Lane on the east. The area as to which resolutions have been passed or for which improvement schemes made extends to 3½ acres, and includes the district already mentioned, a little enlarged to afford proper accesses to the unhealthy areas. The local rate is 3*d.* per 1*l.*, and the whole of the loan applied for from the Public Works Loan Commissioners, amounting to 115,000*l.*, has been duly received and applied for carrying out the purposes of the Act. "All the unhealthy and insanitary properties scheduled under the Greenock Improvement Provisional Order Confirmation Act, 1877, have been acquired, the titles completed, and the prices paid or consigned in bank. The old buildings have in most cases been cleared away, and the street improvements effected. New dwelling-houses for the artisan classes, with proper sanitary arrangements, have been erected, and are fully let. On account of a depression in the property market a number of building sites remain vacant, and the Local Authority are endeavouring to have them disposed of." In Leith, the two areas respecting which official representations have been made extend respectively to nine and eight acres, the first being bounded by Yardheads, Giles Street, and King Street; and the second by Giles Street, Kirkgate, St. Andrew Street, and Sheriff Brae, including Coal Hill. The Local Authority, on April 27, 1883, state: "The Local Authority will be in possession of the whole properties at Whitsunday 1883, the arbitrator having issued his provisional award, and the final award is expected soon. One of the areas into which the scheme has been divided will soon be exposed to feu. A loan of 70,000*l.* has already been received from the Public Works Loan Board, and other 30,000*l.* is being applied for, the estimated recoupment not yet being available."

### ENGLISH MEASURES OF LENGTH.

THE present standard of linear measure appears to have been re-established in 1324 by a Statute of Edward II., which ordained 3 barleycorns, round and dry, make an inch, 12 inches a foot, 3 feet a yard, or *ulnam*. By other statutes and decrees, particularly the Statute 31 Edward III., st. 1 ("Tractatus de Ponderibus et Mensuris"), provision had been made for maintaining uniformity of measure. The Statute of 1324 appears, however, to be the first in which the unit of linear measure was more accurately determined. In the reign of Henry VII. several Statutes were passed relating to uniformity of measure, under which new standards were made, and copies sent to the different county towns throughout England. The standard yard of Henry VIII., 1496, still exists, and is probably of the same length as the old Saxon yard. This ancient standard is a bronze rod, the length of the yard being the distance between the ends of the rod, and it was in constant use for the verification of other yards until the reign of Queen Elizabeth. After allowing for the estimated wear of the standard, it is found to be of the same length as the present standard yard. In 1601, in consequence of a Royal Roll addressed by Queen Elizabeth to the Barons of the Exchequer, new standard measures were made, including a yard (36 inches), and an ell (45 inches), subdivided into inches, twelve of which made a foot. There is no record of the mode in which these standard measures were constructed, but as Queen Elizabeth's measures of length have always been found to agree nearly with those of Henry VII., it is supposed that they were copies of the more ancient standards.

The standard yard of Queen Elizabeth remained the only legal standard yard until the passing of the Act 5 George IV., c. 74, 1824. The committee of weights and measures of 1750-60, of which Lord Carysfort was chairman, reported, however, that Queen Elizabeth's standards were very coarsely made, the divisions on them not being exact, the rods being bent, and, therefore, very bad standards. The committee being informed that in 1742 the Royal Society had with great pains taken an exact measure of these standards, caused new standards to be made, which were compared with the Royal Society's standard. One of the new standards thus made was sealed up by the committee and delivered into the custody of the Clerk of the House of Commons; another of the standards being kept at the Exchequer office for common use in sizing legal yards.

Although the standard of 1758-60 was not referred to for general use, there is no doubt it was for many years regarded as the scientific representative of the standard yard, and in 1824 an Act was passed declaring that after May 1, 1825, the straight brass rod in the custody of the Clerk of the House of Commons, whereon the words and figures "Standard Yard, 1760," were engraved, should, at the temperature of 60° Fahr., be the original and genuine standard of that measure of length or lineal standard called a yard, and that one-third of such yard should be a foot



The standard yard (1760) deposited in the House of Commons then continued to be a legal standard until the burning of the House in 1834. In 1838 the Chancellor of the Exchequer appointed a committee to replace the standard destroyed, and in 1855 the Act 18 & 19 Vict., c. 72, was passed, declaring that the straight line or distance between the centres of the two gold plugs in the bronze bar deposited at the Exchequer should be the genuine standard of length. By the Weights, Measures, and Coinage Act, 1866, the standard yard was transferred from the Exchequer to the custody of the Board of Trade. In 1878, by the Consolidating Act 41 & 42 Vict., c. 49, the bronze bar (1855) deposited with the Board of Trade was continued as the Imperial Standard Yard, and it is still the standard for determining the yard measures of this country. The standard of Henry VII. has thus been continued down to the present time without legal or practical interruption.

### THE LANCASHIRE ROMAN ROAD.

A SPECIAL meeting of the Lancashire and Cheshire Antiquarian Society was held on Tuesday, for the purpose of discussing the subject of the Roman road over Blackstone Edge.

Dr. Colley-March said he held that the road was Roman in all its physical characteristics. Its size, strength, and solidity indicated that it was designed for a very considerable traffic, while a structure so massive and costly could hardly have been made by other than a wealthy and imperial power. The manner in which it was made appeared to be Roman. The foundation was of sand and rubble, and in this the stones of the causeway were bedded. The pavement was convexly arched from side to side, and its centre was formed by a line of large blocks of millstone grit to where the ordinary setts were built up, while these were supported on the outside by buttressed curbstones. The mode of foundation drainage was also Roman, and was that of a bilateral foss, a ditch on either hand. It was the filling up of these dykes by rain wash that had caused so much of the road, especially on the eastern side, to be covered by bog and peat. The route or direction, too, was Roman. It ascended the steepest slope not only without winding, but in a line at right angles to the crest of the hill; and he was not aware of any pack-horse track in the kingdom of which this could be stated. Besides the evidence of antiquity furnished by those portions of the road that were left, there was that which was afforded by all the important parts that were gone. In the neighbourhood of Blackstone Edge were places where the road must have crossed a stream, and where there was now no trace of a bridge. English roadmakers had usually built bridges of stone, and if the causeway under discussion was constructed or even used in anything like modern times such a total evanishment of all corresponding positive remains would appear well-nigh inexplicable. On the other hand if the road was Roman they might suppose either that its bridges having been of wood had disappeared by natural decay, or that the present streams having cut their course since Roman times no bridging was then required. Not the least striking evidence of antiquity was the fact that on the eastern portion of the road, and at a spot from which all wrought stones had disappeared, was "The Devil's Pavement." A name of that sort might be taken to indicate that the paved road once passed in that direction, but that its structure was so different from the familiar pack-horse tracks of the district that it could have been the work only of malignant powers. The western portion of the road was the most interesting from its containing a line of trough stones which occupied the centre of a causeway 16 feet across, or, measured within the curbstones, a compact paved roadway 15 feet wide. The gradient was about 1 in 5. Dr. March discussed two theories with regard to the trough stones, the pedal or foot furrow theory, and the skidding theory. A pack-horse track of a highway was, he observed, called a "pack and prime way." Such roads were made of a series of thick transverse blocks of millstone grit, on which horses walked, and which they often wore into deep furrows. There was a side pavement for foot passengers, and no provision for wheeled vehicles. It was difficult to conceive that a driver could compel his galloways, or that they would themselves prefer to toil up a gradient of 1 in 5 in a mathematically straight line and on a perfectly smooth surface—because if the furrow was made by horses' feet the stones must have been once entirely without a groove—where they could wind to and fro on a spacious and even road whose pavement afforded ample foothold. Something had been said about a "straddle mark" at the bottom of a pack-horse furrow. There was sometimes the faintest possible indication that the furrow had been made by two feet. He had made many examinations but he had never seen a stone, much less a line of stones, in a pack-horse furrow with a genuine convex bottom. Its usual shape was a true and even concavity. In the western slope of the Blackstone Edge he doubted if there was one stone which presented an even concavity. The wheel ruts, he maintained, though variable in appearance, were constant in position. The size of the ruts, taking the narrowest as a guide, showed that the wheels that wore them were 2 inches broad. A Roman chariot wheel with the woodwork petrified had been found at Portici.

The tire was of iron and measured 48 inches in diameter, 1 in thickness and 2 in breadth. Dr. March pointed out in detail the position of the wheel-ruts with regard to the furrow as supporting the skidding theory. That the skidding theory should be true it was necessary that the gradient should be sufficient to make the brake power desirable; that the trough should present a planed appearance rather than, or, if they pleased, as well as a trodden one, that the wheel-rut on the road should correspond with it, and that it should be absent or bear different characteristics on the summit of the hill. On the summit of the hill there were no trough stones at all. In some parts it seemed occupied with disturbed setts, in another part was a causeway 12½ feet broad, with a central line of stones, but smaller than the troughed ones, and either not grooved at all or very slightly worn indeed. It was here, according to one writer, that pack-horses, overcome by fatigue, lay down to rest. Happily, the skidding theory was not exclusive. Everything should be admitted. In this trough might have revolved the wheels of waggons that had to be kept by such means from quitting the road in the frosts of winter or the obscurity of the night. In this trough the rains that it received might have trickled down in such wise that though it could not have drained the road, at any rate it drained itself. In this trough in Indian file might have marched many legions of Latin soldiers leaving behind them not so much "footprints on the sands of time" as impressions on the millstone grit of a swaggering imperial straddle. In this trough might have toiled the patient pack-horses of the country, millions of them, with acquired tastes for inherited tendencies. In this trough might have shuffled the sandals of eminent Roman guides whose midnight mission it was to lead over a mountain pass, under cover of darkness, the conquerors of the world who dared not cross by day. All he contended for was that in this trough, and on this gradient, not only skidding was practised, but that it must have been and that it was.



Mr. Blomfield, Scott, and Street.

SIR,—Mr. Blomfield is very indignant that anyone should write anonymously to find fault with any works of Scott or Street. Let me quote a few instances *within my own knowledge* of their failings, and ask Mr. Blomfield if he can palliate them. Scott destroyed all the historical value of the choir of Ripon Minster, by moving the fourteenth century sedilia out of their place, and setting the altar against the east wall. At Edwin-Loach he built a bit of Chartres cathedral within a few yards of the Early Norman church, which wanted no more than a new roof. I myself found and put together the bowl of the Norman font; the vicar assured me that Sir G. Scott never once came near the place. As to Mr. Street, does Mr. Blomfield know what he did about Christ Church Cathedral, Dublin, or about Sir Tatton Sykes' churches, in both which cases he had no limit as to cost? In the former case the drains in the crypt were made without any outlet, although it stands on the side of a hill; and the crypt used to fill with water until another architect had to be employed to rectify his blunder—for Street vouchsafed no reply to about fifty letters sent him on the subject. On Sir T. Sykes' property, West Heslerton church (new) has no provision for an organ; and in the vicarage, the rain poured through the roof, and neither windows nor doors were windproof. At Weaverthorpe snow came through the roof, because no felt was laid under the lead. At Luttons, a belfry staircase was forgotten, the bell-ropes could not be mended, and a brass screen, designed by Street, and costing Sir T. Sykes 500*l.*, was *painted* over, because it did not harmonise with his reredos. At another church, near Driffield, a Norman font was buried, to make way for a new alabaster one. The same sort of thing happened at St. John's, Torquay, where the interior was flooded through not using cement for the exposed walls. Your readers will remember that the chief opponents of the high-pitched roof at St. Albans were Messrs. Street and Christian—the very people who copied it at Southwell, making, however, the only mistake possible in a lead roof, viz., putting a straight roll along the ridge.

Let me also ask Mr. Blomfield himself if he remembers a church tower at East Sheen which fell down? And if he is the architect of a tower now being built near Worcester—to contain a peal of bells, the tenor of which is to be 3 tons—with walls 3 feet thick and the tower only 14 feet square?

Very different was the way in which another architect, systematically snubbed by the Royal Academy—Mr. Burges—carried out his works. Every stone of Cork Cathedral and his churches near Ripon bear witness to his thought and care.

Allusion was made in your columns to a reredos in a Hertfordshire private chapel—that of Mrs. Gerard Leigh, at Luton Hoo. In that case Street allowed the sculptor (Woolner) to make his bill



and his reredos so big that the lady carted it away, and it is now at Manchester.

The addition of my name to this would convey nothing to Mr. Blomfield. You, sir, can assure him that I am not Sir E. Beckett, and

NOT AN ARCHITECT.

November 17, 1883.

#### Plain Speaking.

SIR,—According to Mr. Blomfield's letter in your current number, everybody who expresses in print an opinion under a *nom de plume* does a dastardly act. He is, it seems, to be regarded as a cur dog, who barks behind railings in safety, and should be passed by in silent contempt. All this, forsooth! because some one happens anonymously to differ from Mr. Blomfield on a professional question, in which there is nothing personal between them. Your correspondent, in withholding his name, has done precisely that which, under like conditions, is, by universal rule, conceded as fair and at the writer's option. It is true that a man may conceal his name under motives of malice, but it is equally true that he may do so under a laudable avoidance of self-assertion. *Per contra*, he may publish it worthily or in contemptible quest of publicity under motives of vanity.

Your obedient servant,

November 20, 1883.

NEMO.

SIR,—I was afraid that Mr. Blomfield would have attacked me in the vein of Hercules or Ancient Pistol, and then of course there was an end to the "Plain Speaker" and his heresy. But I felt more at ease when I saw that he appeared in the rôle of a philosopher who was created in order to make people smile. Everyone who has seen the "School for Scandal" must have recognised at once the source of the pair of sentences with which I was chastised last week, and many were probably amused to find that the moralities of Joseph Surface supply the place of a "Ready Letter Writer" in giving inspiration to Mr. Blomfield. There is an unmistakable likeness between the sayings of the man of sentiment and that aphorism about the canine character of every writer who does not care to advertise himself by means of signed letters. The philosopher would be proud of a disciple who could formulate that wonderful sentence and its companion about the "no man" who does something or other. In both we have not only lofty ideas, but the well-chosen words abounding in r's and s's, by means of which Virtue, when aided by good emphasis, becomes triumphant on the stage. Sir Peter Teazle, who, like myself, was once an admirer of wisdom of this kind, says that there is nothing in the world so noble as a man of sentiment; and who, with Mr. Blomfield's epistle before them, could be of a different opinion? although he evades the difficulty of writing a reply by the easy plan of objecting to unsigned letters. But nobility is not to supersede truth and common sense.

I take the liberty of maintaining against Mr. Blomfield that one may withhold one's name from a letter in a newspaper without being afraid or ashamed. Letters of the kind might be said to be an English institution, for they are as old as the newspapers. They are found in the *Spectator* in the early part of the eighteenth century, and in the *Times* of the end of the nineteenth century. Some of the greatest and most honourable men and women have written in that form, and, knowing this, a plain man like myself may not think it to be a crime to follow their example. I grant that there is a limit. If a man, for example, wrote that he had seen Mr. Blomfield copy some of Mr. Street's details and apply them, he ought to give his name and the fullest particulars of time and place; but if he said that Mr. Blomfield's defence of Mr. Street was not convincing, he would be merely expressing a common opinion, and anonymity is then allowable. Things that are within everybody's knowledge do not need the support of personal authority, as if they were libellous allegations. Of course there are letters that for other reasons would not gain admission into a newspaper unless names were attached. I cannot help thinking that Mr. Blomfield's is one of them. It is now manifest that, even with the attraction of his name, the *Times* was compelled, out of pity for its readers, to keep clear of Mr. Blomfield and his serious straightforwardness.

Yours obediently,

A PLAIN SPEAKER.

#### LEGAL.

Exchequer Division, Dublin.

(Before Mr. Justice ANDREWS.)

MOONEY v. WEST AND ANOTHER.

THE ACCIDENT AT ST. PATRICK'S CATHEDRAL.

Application was made in this case on behalf of plaintiff for liberty to administer interrogatories to the defendants. The action was brought by an infant under the age of twenty-one years, who sued by his father to recover damages from the defendants, the Dean and Chapter of St. Patrick's Cathedral, for injuries sustained through the falling of one of the buttresses of the cathedral in September 1882, whereby portion of the *débris* fell

upon the plaintiff and inflicted upon him serious personal injury of a permanent character. The accident took place on September 14, 1882, and the nurse in whose arms the plaintiff was at the time was killed by the falling *débris*. Counsel stated that a motion had some time ago been instituted to compel the defendants and also Mr. James P. Pile, the architect in charge of the works at the cathedral as contractor or otherwise, to make a discovery of documents, but the defendants replied they had no documents in their possession having reference to the cause of action. The interrogatories which counsel now asked leave to deliver were, firstly, whether the Dean and Chapter of the cathedral had employed any person or persons to do the work which was being carried on at the time the buttress fell; and secondly, whether there was any written or verbal contract in existence as to the doing of the work. The allegation of the plaintiff was that the accident was the result of negligence on the part of some of the persons employed at the works. Counsel submitted that the interrogatories were reasonable and fair, and that he was entitled to the order. Counsel for the defendants argued that the motion was late, and that the interrogatories were of a fishing nature, and were with the object of discovering whether the plaintiff had a cause of action against the Dean and Chapter, and if not, whether he could proceed against the contractor.

Mr. Justice Andrews held that the interrogatories were reasonable, proper, and necessary, having regard to the nature of the action, and to the fact that he had brought forward a motion for discovery of documents while the pleadings were still open; and the defendants' answer to the application having been unsatisfactory, he held the plaintiff entitled to put the interrogatories, to enable his counsel to determine whether they should proceed further with the action against the Dean and Chapter of the cathedral or against the contractor, or whether he should institute new proceedings against any other person. He therefore granted the motion.

#### CHURCH BUILDING AND RESTORATION.

**Adlington.**—The memorial-stone of a church in the village of Adlington has been laid. The building—which has been designed by Messrs. D. Barry & Son, architects, of Liverpool—when completed will consist of chancel, nave, north and south aisles, and north and south transepts, and there will also be an organ-chamber and clergy and choir vestries. A tower will surmount the principal entrance, which will be in the second bay of the south aisle. The interior of the nave will contain an arcade of five pointed arches, supported with moulded pillars with caps and bases. The aisles will be lighted with cusped lancets, the west window being of five lights, and with enriched tracery. The roof will be open-timbered, and the benches will be of pitch pine. The floors will be of wood blocks. The work is being executed by Mr. Winward, contractor of Wigan.

**Catherington.**—On Wednesday the parish church of St. Catherine's, Catherington, Hants, was reopened, after extensive reparation and additions. During the works some very interesting discoveries were made—e.g., two original thirteenth-century tempora paintings in a fair state of preservation, the head of the old churchyard cross, and some early sepulchral slabs. The church is an interesting specimen of the Transitional Norman period. The gentry of the parish and neighbourhood have been liberal with their contributions, and the poorer parishioners, so that all has been done in a most substantial way. The work has been under the direction of the architect, Mr. Edmund Ferrey.

**Cheriton Fitzpaine.**—The parish church, a fine fifteenth-century church, has recently undergone some external restoration. It is planned with a nave and chancel, north and south aisles, western tower, and south porch with parvise over. The work has been done under the supervision of Mr. James Crocker, of Exeter. It is intended to shortly continue the restoration in the way of reseating the whole of the church, laying tile floors, restoring the windows, &c.

**Pocklington.**—The restoration of Millington church, Pocklington, has been successfully completed from designs by Mr. T. L. Moore, architect, of Hampstead, N.W. The church has been reseated with open stalls, painted dark green; and the old high-backed pews have been partially used as a dado for the walls. The roof of the nave has been recased, and also decorated with distemper colour. A new vestry has been added at the west end of the church, and a substantial oak pulpit takes the place of the old one in the north-east corner. The chancel has been filled with carved oak seats for the clergy and choir. The work of restoration has been carried out by Mr. Elwell, of Beverley.

**Dallington.**—The parish church was restored some years since. The church has now been restored from designs and under the superintendence of Mr. Edmund Law, architect, Northampton, who has successfully completed the work begun by his late father, who restored the church. The work has necessitated the rebuilding of a large portion of the chancel. The east end, which was of very modern date, has been taken down, and the chancel



extended some 5 feet eastwards on ancient foundations, which were discovered at the time the church was restored, and a beautiful east window inserted in the place of the debased piece of work which before existed. The floor of the sanctuary is executed in marble mosaic, by Mr. Ebner, of Clerkenwell Road, London, and Maw's tiles in the chancel floor. The work has been carried out by Messrs. Edmund Roberts & Sons, of Weedon, who executed the works in the restoration of the church. The carving was executed by Mr. Charles Phillips, of Northampton.

**Romford.**—The Congregational church, South Street, Romford, which was destroyed by fire, has been reconstructed and reopened. Plans for the restoration of the building were prepared by Mr. E. C. Allam, architect, of Romford, and were entrusted for execution to Messrs. Staines Bros., who built the church originally. The slated spire has been replaced by a stone spire, 4 feet higher than the original one. The total cost of the reconstruction has been about 2,800*l*.

**Broughton, Manchester.**—The new Baptist chapel consists of entrance lobbies, 6 feet wide, leading to the school-room, 33 feet by 50 feet long and 28 feet high, with an open-timbered roof. The room will seat on open pitch-pine benches 280 persons, and there is a class-room on either side of lobbies having glazed sliding screen opening into the main room. A platform is placed at the opposite end, with a covered baptistery in front of it. On one side behind platform is a vestry, 11 feet by 12 feet 9 inches, and on the other a church parlour, 21 feet 6 inches by 12 feet 9 inches, with open fires. Kitchen and heating chamber under same in cellar. At opposite end to platform, there is a gallery for 84. The total accommodation is for 404 adults. There is also an infants' room for 60 children. The building is in the Early English style, the walls are of red stocks and stone dressings, and has been carried out from the designs of Mr. George Baines, Accrington. The total cost will be about 2,000*l*.

### SCHOOL BUILDINGS.

**Yeadon.**—A Board school, which has been designed by Mr. W. T. Morley, of Bradford, is now complete. Accommodation is provided for 1,070 children, the schools being divided into three departments. Those for the boys and girls are placed at either end, while provision is made for the infants in the centre. The department for boys consists of two large rooms, 53 feet and 75 feet long respectively, with a width of 20 feet in each. That portion of the building devoted to the girls is similarly arranged. The infants' school consists of a large room 60 feet by 32 feet by 22 feet high, and is provided with a similar number of class rooms to the other departments. Separate entrances have been provided for each department, and in addition doorways have been fitted up at the back which give access to the playgrounds, of which there is one for each department. Covered grounds have been laid out for the girls and infants, the latter having a covered approach leading to theirs from the school. At either end of the building are turrets of dissimilar design, and these form the chief entrances to the boys' and girls' sections of the school. The total cost is about 5,000*l*.

### NEW BUILDINGS.

**Enlargement of Elswick.**—Plans have been prepared for one of the most extensive building operations contemplated in Newcastle for many years, namely, the laying out for building sites of a very large portion of the late Mr. Buddle Atkinson's estate, the trustees of which are Sir W. G. Armstrong and Mr. Benjamin Chapman Browne. The estate begins exactly at the western boundary of the borough, and extends westward over 800 yards, and northward to Benwell 820 yards, the total area of the estate being 473,000 superficial yards. The portion at present put into the market has an area of 140,000 superficial yards. It was originally intended to give the streets a width of 40 feet, but to meet the requirement of the Benwell Local Board they were reduced to 36, to make the back streets 24 feet in width instead of 20, as originally laid out, and the streets will contain on an average twenty-eight houses, with an eastern and western aspect. The approximate area in superficial yards of the various sites will be as follows: For houses in Atkinson Street, 153; Wallend Street, 146; Woolley Street, 140; Aline Street, 122; Violet Street, 122; School Street, 146; Clara Street, 180; Hugh Street, 140; Frank Street, 146; Maughan Street, 140; and Buddle Road, 250. The western portion of the works of Messrs. Sir W. G. Armstrong, Mitchell & Co. will be exactly at the south-east of the estate. The plans for the laying-out of the whole estate have been prepared by Mr. William Glover, architect, 16 Market Street, Newcastle.

**St. Mary Church.**—The town hall at St. Mary Church has lately been completed. The architect was Mr. G. S. Bridgman, of Torquay. The erection of the building has cost 2,718*l*. 2*s*. 6*d*.; furniture, &c., 373*l*. 17*s*.; architect's fees, 154*l*. 12*s*. Mr. Harris was the builder.

**Chelmsford.**—The new Infirmary and Dispensary Buildings at Chelmsford have been erected from the designs of Mr. Fred. Chancellor and Mr. C. Pertwee. The buildings throughout are supplied with hot and cold water, gas is laid on to all wards, corridors, and rooms, and special attention has been devoted to the ventilating and sanitary arrangements.

### GENERAL.

**Mr. J. Volum**, of Geelong, Australia, has intimated his intention of presenting to his native town, Peterhead, N.B., a picture, *The Pool of Bethesda*, to be placed in the Arbuthnot Museum. The picture formed part of the collection of the late Mr. Giles.

**Mr. W. J. Palmer**, of Reading, has made a further contribution of 15,500*l*. towards the cost of the town hall and municipal buildings at Reading.

**Diggle Hall**, Hindley Green, Lancashire, which has just been elaborately decorated for a wealthy colliery proprietor, was on Wednesday partially destroyed by fire.

**The Incorporated Society of British Architects**, on Wednesday, elected Mr. W. P. Burton, Mr. Alfred East, Mr. W. Ayerst Ingram, Mr. J. Macculloch, and Mr. Thos. Pyne as members.

**A Bronze Statue of the Earl of Beaconsfield** was placed upon the pedestal erected for it in front of St. George's Hall, Liverpool, on Tuesday.

**The City Church and Churchyard Protection Society**, at a meeting held on Wednesday, adopted the following resolution: "That this meeting views with deep regret the proposal to pull down, desecrate, and disendow the churches of St. Olave's Jewry, St. Catherine Coleman, and St. Thomas in the Liberty of the Rolls, as causing scandal and disturbance of the remains of the dead, besides being an injustice to the resident parishioners."

**The "Allgemeine Zeitung"** states that in the forests of Sonora, a province of Western Mexico, near Magdalena, a pyramid has been found measuring 4,350 feet at its base, and rising to the height of 750 feet! A carriage road winds about this enormous structure from base to summit. The face consists of granite blocks carefully cut and perfectly fitted together.

**The Electric Lighting Committee** appointed by the Leeds Town Council, on Wednesday decided that an installation for lighting the new municipal buildings be proceeded with without delay; and a sub-committee has been appointed to report upon the merits of the incandescent and arc lighting for indoor purposes, and also as to utilising gas engines for the necessary power.

**Birmingham Architectural Association.**—The first ordinary meeting of the session was held on Tuesday evening at Queen's College, under the presidency of Mr. W. H. Kendrick. There was a good attendance. One new member was proposed, and, after the preliminary business, a paper on "The True Functions of Art, and the Practicability and Necessity for its Culture in our Town" was read by Mr. Norman Gething. At the close a vote of thanks, proposed by Mr. McConnal, seconded by Mr. V. Scruton, and supported by Messrs. Newton & Stanbury, was accorded to the reader of the paper.

**The Directors of the Dundee Royal Lunatic Asylum** have prepared plans for laying out the old asylum grounds for building purposes. The streets on the plan are 50 feet in width, and are arranged in the way considered best suited for properties consisting of tenements of dwelling-houses and shops. The old asylum buildings will probably be utilised in some way.

**Mr. Walter Scott**, contractor, of Newcastle-on-Tyne, has received the contract for carrying out the drainage and formation of roads on the South Benwell estate.

**Mr. William Simpson**, builder and contractor, Roman Road, Victoria Park, recovered 2,000*l*. from the North London Railway Company on Tuesday, for injuries sustained by him in a collision last November.

**A Builder** has been fined 5*l*. with costs at Woodford for commencing the erection of certain houses without intimating his intention to the urban authority, or submitting plans and sections of the work, as required by the by-laws.

**The Master Joiners' Association of Edinburgh** at a meeting held last week, decided that the rate of wages to competent workmen should be reduced to 6½*d*. per hour on and after to-day (Saturday). At the end of April, in consequence of a strike, the employers had conceded the men an advance of ½*d*. per hour, raising the wages from 6½*d*. to 7*d*.

**Kershaw's Patent Pneumatic Ventilators** have been recently supplied to buildings at Overstone Park, the seat of the late Lord Overstone, and also to new stoves recently erected at Messrs. Jacobi's lace factory, Nottingham, and have been selected for Mr. Player's large new tobacco factory. They are being supplied for the board-room of the waterworks department, Portsmouth. They have been adopted at the Royal Morningside Asylum, Edinburgh; County Lunatic Asylum, Lancaster; Ulverstone Workhouse, Ulverstone Court-house, Rothbury Court-house, Wooler Police-station; Palatine Hall, Lancaster; St. Paul's Church, Grange-over-Sands; Locher parish church, near Dundee; Congregational Church, Sunderland; Newsham Park Chapel, Liverpool; National Schools, Carnforth; National Schools, Burneston; and St. Paul's Schools, Stayley.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, NOVEMBER 24, 1883.

### TENDERS, ETC.

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\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—  
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### EDITORIAL NOTICES.

The authors of signed articles and papers read in public must necessarily be held responsible for their contents.

No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.

Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.

### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 10 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

BIRKENHEAD.—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 160 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

BRISBANE.—Nov. 30.—Plans are invited for the Erection of a Town Hall. Messrs. Gordon & Gotch, 15 St. Bride Street, E.C.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

NORTHAMPTON.—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street Northampton.

### CONTRACTS OPEN.

ABERDEEN.—Dec. 1.—For Enlargement of Public School. Mr. Thomas Hector, 31 King Street, Aberdeen.

ASHTON-UNDER-LYNE.—For Extensions to Co-operative Stores. Messrs. T. D. & J. Lindley, Architects, Ashton-under-Lyne.

BARROW-IN-FURNESS.—Nov. 28.—For Building Infirmary at the Workhouse, Roose. Mr. J. McIntosh, Architect, 112 Ramsden Square, Barrow-in-Furness.

BACCHES.—Dec. 7.—For Building Temporary Bridge, Removing old and Building new Bridge. Mr. F. S. Rix, Clerk to the Baccles Navigation Commissioners, Baccles.

BECKENHAM.—Dec. 3.—For Additions and Alterations to Stables and Buildings at the Old Manor House, and Formation of Engine Station and additional Stabling, Cart Sheds, Boundary Walls, &c. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

BIRMINGHAM.—Dec. 8.—For Supplying and Fixing Speaking Tubes and Electrical Communication, Lift, and Fireproof Doors; also Clock for Tower, Parish Offices, Edmund Street. Mr. W. H. Ward, Architect, Paradise Street, Birmingham.

BOLTON ABBEY.—For Building Memorial Tower to the late Lord Cavendish. Messrs. Worthington & Elgood, Architects, 110 King Street, Manchester.

BOWNESS.—Nov. 26.—For Additions and Alterations to Business Premises. Mr. Robert Walker, Architect, Finkle Street, Kendal, and Windermere.

CARDIFF.—Dec. 6.—For Building the Cardiff Exchange, Mount Stuart Square, Hall, Bank Premises, Restaurant, Suites of Offices, &c. Messrs. James Seward & Thomas, Architects, 1 St. John's Square, Cardiff.

CLAREMORRIS.—Dec. 5.—For Building Dispensary and Medical Officer's Residence, Ballindine. Mr. Glover, C.E., County Surveyor, Board of Guardians' Office, Claremorris.

CONSETT.—Nov. 26.—For Taking Down and Re-erecting Gallery and other Works to Primitive Methodist Chapel. Mr. Thomas Southron, Architect, 70 King Street, South Shields.

CORKICKLE.—Dec. 1.—For Building Three Semi-detached Villas. Mr. J. S. Moffat, Architect, Whitehaven.

CYMMER.—For Building Dwelling-house and Shop. Mr. Thomas Jenkins, 31 Alfred Street, Neath.

DUDLEY.—For Building Schools by the Union Workhouse. Mr. T. Allen, Clerk to the Union, Town Hall, Dudley.

ELGIN.—Nov. 24.—For Building Cottage. Messrs. A. & W. Reid, Architects, Elgin.

EXETER.—Dec. 4.—For Building Pauper Lunatic Asylum to accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect, 14 Farnival's Inn, London.

FELIXSTOWE.—Dec. 11.—For Enlargement of the Suffolk Convalescent Home. Mr. E. F. Bishopp, Architect, Museum Street, Ipswich.

FLEETWOOD.—Nov. 24.—For Building Post Office and Residence. Mr. C. Pearson Shaw, Architect, 37 St. Peter's Place, Fleetwood.

GATESHEAD.—Nov. 24.—For Building Residence, Durham Road. Messrs. Thompson & Dunn, Architects, 5 St. Nicholas Buildings, Newcastle-on-Tyne.

GLENELG, N.B.—Nov. 26.—For Masons', Carpenters', and other Works of large Additions to the Glenelg Hotel, Glenelg-by-Lochalsh. Messrs. Matthews & Lawrie, Architects, Inverness.

HASTINGS.—Nov. 24.—For Building Cricket Pavilion, Central Recreation Ground. Mr. Arthur Wells, Architect, 25 Havelock Road, Hastings.

LANCHESTER.—Nov. 26.—For Building Primitive Methodist Chapel. Mr. George Race, Architect, Westgate, Weardale.

LONDON.—For Taking Down 9A James Street, Kensington Square, and Clearing Site. Messrs Barker & Roscoe Architects, 191 Earl's Court Road.

NEWCASTLE-ON-TYNE.—Dec. 6.—For Construction of Eight Cattle Sheds, Two Slaughter Houses, &c., at St. Lawrence. The City Engineer, Town Hall, Newcastle-on-Tyne.

NORMANBY.—Nov. 26.—For Alterations to Property, Corner of High Street. Mr. John Harrison, 83 Northgate, Darlington.



**PLYMOUTH.**—For Erection of a Block of Buildings. Mr. Charles King, Architect, 20 Princess Square, Plymouth.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**SHEFFIELD.**—Dec. 6.—For Additions to Netherthorpe School. Mr. C. J. Innocent, Architect, 17 George Street, Sheffield.

**SHEFFIELD.**—Dec. 8.—For Erection of the Montgomery Hall, New Surrey Street. Mr. C. J. Innocent, Architect, 17 George Street, Sheffield.

**SOUTHWICK.**—Dec. 3.—For Additions and Alterations to Board Schools. Mr. Joseph Shields, Architect, Blockett's Buildings, Sunderland.

**ST. GERMAN'S.**—Nov. 29.—For Building Mission Room at Downerry, near Hessenford. Mr. J. Piers St. Aubyn, Architect, Lamb's Buildings, Temple, London.

**THORNBURY.**—Nov. 30.—For Providing and Laying Water Mains (500 yards). Mr. F. C. Williams, High Street, Thornbury.

**WREXHAM.**—Nov. 24.—For Building a Church. Mr. Edwin M. B. Vaughan, Architect, 74 Crookherbtown, Cardiff.

## TENDERS.

### ANDOVER.

For Repairing Pitts Mill, House, Farm Buildings, and Premises, near Andover. Mr. J. HILLARY, Architect, Lonsparish, Hants.

Bronsdon . . . . .	£244 0 0
Beale . . . . .	177 0 0
ANNETT & SON (accepted) . . . . .	174 0 0

### BISHOP AUCKLAND.

For Building Chapel, Superintendent's House, and Entrance Gates to proposed Cemetery, Bishop Auckland. Mr. FRITCHETT, Architect, Darlington.

#### Accepted Tenders.

Bell, mason . . . . .	£973 14 4
Blackett, joiner . . . . .	254 15 11
Woulhouse, plumber . . . . .	78 13 4
Pollard, slater . . . . .	64 17 8
Willis, painter . . . . .	31 15 0

### BO'NESS.

For Street Paving Works, Bo'ness. Mr. J. L. HOUSTON, Surveyor.

#### Contract No. 1.—Supplying Sets.

J. W. & G. Stratton . . . . .	£600 0 0
G. & R. Cousin . . . . .	600 0 0
Riddell . . . . .	520 0 0
Galagher . . . . .	520 0 0
Peattie . . . . .	510 0 0
A. & J. Fall . . . . .	506 13 4
Mallison . . . . .	500 0 0
W. & W. Neilson . . . . .	500 0 0
Waugh . . . . .	480 0 0
J. & W. McDonald . . . . .	466 13 4
Wilson . . . . .	460 0 0

#### Contract No. 2.—Redressing Old Stone.

W. & W. Neilson . . . . .	£733 6 8
G. & R. Cousin . . . . .	750 0 0
Wilson . . . . .	700 0 0
A. & J. Fall . . . . .	650 0 0
J. W. & G. Stratton . . . . .	600 0 0
J. & W. McDonald . . . . .	600 0 0
Mallison . . . . .	483 6 8
Bell . . . . .	466 13 4
Galagher . . . . .	450 0 0
Peattie . . . . .	425 0 0

#### Contract No. 3.—Paving Work, &c.

Mallison . . . . .	£1,821 13 3
W. & W. Neilson . . . . .	1,326 17 9
A. & J. Fall . . . . .	1,262 19 0
J. & W. McDonald . . . . .	1,215 2 11
G. & R. Cousin . . . . .	1,174 13 5
J. W. & G. Stratton . . . . .	1,130 4 0
Galagher . . . . .	915 13 9
Peattie . . . . .	886 9 7

### BRISTOL.

For the Erection of Four Houses and Shops, Union Street, Bristol, for Mr. F. C. J. Fisher. Mr. THOMAS NICHOLSON, Architect. Quantities by Mr. B. W. Pope.

Walters . . . . .	£3,300 0 0
Stephens & Bastow . . . . .	3,250 0 0
Walker & Son . . . . .	3,250 0 0
Saie . . . . .	3,215 0 0
Williams & Son . . . . .	3,200 0 0
Church . . . . .	2,998 0 0
Hatherley . . . . .	2,987 0 0
Chorley & Son . . . . .	2,985 0 0
Lewis . . . . .	2,930 0 0
Cowlin & Son . . . . .	2,966 0 0
Humphrey . . . . .	2,945 0 0
Balmont . . . . .	2,912 0 0
Forse . . . . .	2,900 0 0
Williams . . . . .	2,897 0 6
Davis . . . . .	2,865 0 0
RIND (accepted) . . . . .	2,635 0 0

### BURSLEM.

For Alterations to Black Lion Inn, Burslem, for Messrs. Ind, Coope & Co. Mr. J. BEARDMORE, Architect, Stoke-upon-Trent.

Barlow, Stoke-upon-Trent . . . . .	£145 0 0
Tildesley, Hanley . . . . .	131 10 0
WARD, Hanley (accepted) . . . . .	117 10 0

### BURRINGTON.

For Restoration of Burrington Church, Cornwall. Mr. JOHN D. SEDDING, Architect, 18 Charlotte Street, Bedford Square, W.C.

Davis, Bristol . . . . .	£1,975 0 0
Harding & Vowles, Bristol . . . . .	1,380 0 0
Trask, Norton . . . . .	1,289 0 0
MERRICK & SON, Glastonbury (accepted) . . . . .	1,273 0 0

### DARRINGTON.

For Building Wesleyan Chapel, Darrington, near Pontefract. Mr. JAMES WILSON, Architect. Quantities by the Architect.

Heseltine, mason . . . . .	£288 0 0
Gelder, joiner . . . . .	170 0 0
Binns, plasterer . . . . .	39 0 0
Worsnop, slater . . . . .	41 10 0
Thompson, plumber . . . . .	24 0 0
Butler, painter . . . . .	12 18 0

Total . . . . . 575 8 0

### DAWLISH.

For the Enlargement of St. Mark's Church, Dawlish, and the Re-seating of the new Aisle.

Baker, Dawlish . . . . .	£1,269 0 0
Friend, Dawlish . . . . .	1,250 0 0
Stephens & Bastow, Bristol . . . . .	1,249 0 0
Loveys, Dawlish . . . . .	1,136 16 0
Reynolds, Exeter . . . . .	1,052 5 0
Andrews, Teignmouth . . . . .	1,029 4 0
Philips, Exeter . . . . .	1,020 11 0
Burke, Tiverton . . . . .	998 0 0
Luscombe & Sons, Exeter . . . . .	982 0 0
Foaden, Ashburton . . . . .	949 16 0
Hawkins, Dawlish . . . . .	949 10 0
STEPHENS, Exeter (accepted) . . . . .	943 0 0

### GREAT HORTON.

For Alterations and Additions to Dirkhill Stores, Great Horton, for the Great Horton Co-operative Society. Mr. JOHN DRAKE, Architect, Queensbury. Quantities by the Architect.

Booth & Ward, Clayton, mason . . . . .	£166 10 0
Patchett, joiner . . . . .	126 0 0
Benn, plumber . . . . .	24 10 0
Smithies, slater . . . . .	13 15 0
Sunderland, plasterer . . . . .	12 10 0
Jennings & Whittaker, painter . . . . .	13 5 0

### HAMPTON.

For Building Passenger Station at Hampton, Warwickshire, for the London and North-Western Railway Company.

HARTLEY, Birmingham (accepted) . . . . .	£3,000 0 0
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### HEYWOOD.

For Alterations and Additions to proposed Municipal Buildings. Mr. JAMES DIGGLE, C.E., F.G.S., Borough Engineer. Quantities by the Engineer.

Diggle Bros. (lowest of eight tenders) . . . . .	£1,984 0 0
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### JARROW.

For Laying 9-inch Pipe Sewers and Building Manhole at the West Back of Oak Street and South Back of High Street, Jarrow. Mr. J. PETREE, Borough Surveyor.

Maughan . . . . .	£32 5 0
Adams . . . . .	28 16 6
WAGCH (accepted) . . . . .	27 6 6
Callaghan . . . . .	27 5 10
Surveyor's Estimate . . . . .	33 1 6

### KINSALE.

For Heating Kinsale Church with the "Small Tube" (registered) Hot-water Heating Apparatus.

KING (Limited), Liverpool (accepted) . . . . .	
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### LIVERPOOL.

For the First Contract of the Liverpool Zoological Gardens, Walton-on-the-Hill; comprising Boundary, Walling, and Palisading, Entrance Lodges, with Registering Turnstiles, Subway, &c. Messrs. W. SUGDEN & SON, Architects, Leek. Quantities by Architects.

The whole.	
Cordingley & Sons . . . . .	£5,047 0 0
Treasurer & Sons . . . . .	4,919 0 0
Foster & Dicksee . . . . .	4,898 0 0
Fish . . . . .	4,890 0 0
I. & G. Chappell . . . . .	4,617 0 0
Anwell . . . . .	4,516 5 10
Thornton & Sons . . . . .	4,505 0 0
Tomkinson & Co. . . . .	4,500 0 0
Holme & King . . . . .	4,483 0 0
Bridge . . . . .	4,370 0 0
Cotterill . . . . .	4,362 0 0
Bulcock . . . . .	4,350 16 3
Macleod . . . . .	4,333 0 0
Warburton . . . . .	4,242 2 10
Massey & Sons . . . . .	4,230 0 0
Bromage . . . . .	4,183 0 0
Kelly Bros. . . . .	4,173 0 0
Howe . . . . .	4,093 0 0
Beckett . . . . .	4,069 9 0
Yates . . . . .	4,049 0 0
Hughes & Stirling . . . . .	3,988 0 0
Everton Quarry Co. . . . .	3,920 0 0
EVERTON QUARRY CO., without the iron-work (accepted) . . . . .	2,670 0 0

#### Ironwork only.

Handyside & Co. . . . .	1,722 10 0
Coventry Art Metal Works . . . . .	1,705 13 0
Smith & Co. . . . .	1,640 6 6
Falkirk Iron Co. . . . .	1,350 5 0
Smith & Son . . . . .	1,349 1 8
Elgodd Bros. . . . .	1,277 0 0
Hird . . . . .	1,251 18 0
Worrall . . . . .	1,205 14 9
Simpson & Wood . . . . .	1,149 9 9
Gimson & Co. . . . .	1,089 10 6
RAMMAGE (accepted) . . . . .	999 17 6

### KEIGHLEY.

For Taking Down and Rebuilding a Portion of Messrs. Summerscale's Works, Corney Lane, Keighley. Mr. J. B. BAILEY, Architect, Keighley.

W. Sharp, Oakworth, mason and bricklayer . . . . .	
Hord, Keighley, carpenter and joiner . . . . .	
Thornton, Bingley, slater . . . . .	
E. Sharp, Keighley, plasterer . . . . .	
Newbould, plumber and glazier . . . . .	
Bowers, Keighley, painter . . . . .	
Clapham Bros., Keighley, ironfounders . . . . .	

For Erection of Boundary and Garden Walls on the Highfield Estate, Keighley. Mr. J. B. BAILEY, Architect, Keighley.

HOLMES, Keighley (accepted).

### KINGSBRIDGE.

For Restoration of Doddbrooke Church, Kingsbridge, Devon. Mr. JOHN D. SEDDING, Architect. Quantities by the Architect.

Messrs. Rindle . . . . .	£3,490 0 0
Piper . . . . .	2,640 0 0
Searle . . . . .	2,592 0 0
Bone & Son . . . . .	2,468 0 0
Pearse . . . . .	2,305 0 0
Messrs. WILLOCKS (accepted) . . . . .	2,228 0 0
Patey . . . . .	2,230 0 0
Mitchell, Chapman & Co. . . . .	1,926 0 0

### LONDON.

For Repairs to the Brandon Arms, Brandon Road, Brixton, for Messrs. Truman, Hanbury, Buxton & Co. Mr. EDWARD BROWN, Surveyor, 18 Hanbury Street, Spitalfields.

#### HAWKINGS (accepted).

For the Erection of Five Blocks of Artisans' and Labourers' Dwellings, Petticoat Square.

HARPER (accepted) . . . . . £4,192 0 0  
The Dwellings will provide accommodation for 937.  
Twenty-two tenders were received for the work.

For Alterations to Godden Cottage, Alfred Road, Buckhurst Hill, for Mrs. B. L. Paul. Mr. EDWARD BROWN, Surveyor, 18 Hanbury Street, Spitalfields.

Marr . . . . .	£190 0 0
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HAWKINGS (accepted) . . . . . 176 0 0

Cook . . . . . 175 0 0

For Alterations and Additions at 75 Westbourne Grove.

Axford . . . . .	£985 0 0
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Emery . . . . . 925 0 0

Sage . . . . . 885 0 0

Drew & Cadman . . . . . 692 0 0

BRAY & POPE (accepted) . . . . . 670 0 0

For Works at the Clarendon Public House, Mildmay Park Road.

Homan & Co. . . . .	£400 0 0
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Green . . . . . 335 0 0

Rayment & Son . . . . . 284 0 0

Burton . . . . . 242 0 0

Scharien & Williams . . . . . 216 0 0

For Repairs to the Queen's Arms, Chelsea, for Messrs. Truman, Hanbury, Buxton & Co. Mr. EDWARD BROWN, Surveyor, 18 Hanbury Street, Spitalfields.

Jackson & Toad . . . . .	£220 0 0
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Hill & Pearson . . . . . 179 0 0

Hawkings . . . . . 145 0 0

Read . . . . . 134 0 0

MARR (accepted) . . . . . 129 10 0

For Alterations and Repairs to No. 58 Leadenhall Street, City, for Messrs. D. Radford & Co. Mr. A. BRADLEY ROOKE, Architect, Great James Street, W.C.

Eaton . . . . .	£1,180 0 0
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Dainton . . . . . 1,023 0 0

Axford . . . . . 1,010 0 0

Brass . . . . . 998 0 0

Stimpson . . . . . 990 0 0

Dove . . . . . 975 0 0

GREENWOOD (accepted) . . . . . 924 0 0

Tozer . . . . . 907 0 0

For Rebuilding Nos. 104 and 106 Salmon's Lane, Limehouse.

Lewin . . . . .	£930 0 0
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 Walker . . . . . 840 0 0 |

Beale . . . . . 826 0 0 |

Higgs . . . . . 823 0 0 |

Forrest . . . . . 787 0 0 |

Johnson . . . . . 757 0 0 |

Thomson & Tweed . . . . . 751 0 0 |

Young . . . . . 749 0 0 |

Thomerson & Son . . . . . 734 0 0 |

Plant . . . . . 725 0 0 |

Salt . . . . . 690 0 0 |

Howlett . . . . . 597 0 0 |

For Alterations and Additions to Three Shops in Seven Sisters Road, Holloway, for Mr. Wood.

Richardson . . . . .	£939 0 0
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Wilkinson . . . . . 851 11 0 |

Wood . . . . . 775 0 0 |

Darnford & Langham . . . . . 719 0 0 |

Mattock Bros. . . . . 677 0 0 |

Larke & Son . . . . . 670 0 0 |

Steel Bros. . . . . 653 0 0 |

Shurmur . . . . . 637 0 0 |

Harper . . . . . 637 0 0 |

Stevens . . . . . 539 0 0 |

For Building Presbyterian Church, Richmond.

Wall Bros. . . . .	£4,152 0 0
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Dowsing & Sons . . . . . 4,140 0 0 |

Robertson . . . . . 4,100 0 0 |

Tavener & Sons . . . . . 3,960 0 0 |

Adam |



**LONDON—continued.**

For Painting and Repairs at Workhouse and Infirmary, Marloes Road, Kensington. Mr. ARTHUR BAKER, Architect, 14 Warwick Gardens, Kensington.		
Lucas . . . . .	£3,032	0 0
Hobbs . . . . .	2,652	0 0
Oldis . . . . .	2,407	0 0
Hudman . . . . .	2,390	0 0
Thompson . . . . .	2,166	10 0
M. McCarthy . . . . .	2,145	0 0
Johnson . . . . .	1,979	0 0
D. McCarthy . . . . .	1,900	0 0
Jebbins . . . . .	1,615	0 0
Harper . . . . .	1,563	0 0
Stewart . . . . .	1,560	10 0
M. & M. Flemming . . . . .	1,555	0 0
Golbourne . . . . .	1,430	10 0
Carpenter & Poole . . . . .	1,310	0 0
STEVENSON (accepted) . . . . .	1,299	0 0

**MARKET HARBOROUGH.**

For Construction of Sewers and Ventilation of existing Sewers, Market Harborough. Mr. J. W. WILLS, C.E., Surveyor. Quantities by the Surveyor.

*Sutton Westerly Sewers.*

Stephenson, Market Harborough . . . . .	£168	10 0
Smith, Great Bowden . . . . .	139	10 0
Smith, Little Bowden . . . . .	125	7 4
Smith, Leicester . . . . .	125	0 0
Surveyor's estimate . . . . .	133	3 1

Acceptance deferred pending proposed extension of sewers.

*Church Langton Sewer Ventilation.*

Stephenson, Market Harborough . . . . .	£64	5 0
Smith, Great Bowden . . . . .	51	16 0
SMITH, Leicester (accepted) . . . . .	50	0 0
Surveyor's estimate . . . . .	48	12 0

**MARYPORT.**

For Extension of North and South Piers, Maryport.		
Hodgson, Workington . . . . .	£6,450	0 0
Doherty, Maryport . . . . .	5,550	0 0
Census, Whitehaven . . . . .	4,806	0 0
Gradwell, Barrow . . . . .	3,832	10 4
SMITH, Workington (accepted) . . . . .	3,496	3 7

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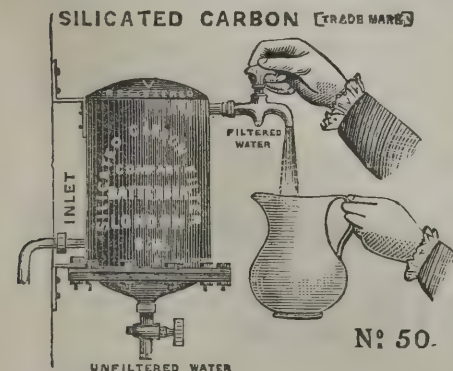
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For new River Wall and other Works, Montrose Harbour.  
Mr. DAVID CUNNINGHAM, M.Inst.C.E., Engineer,  
Dundee. Quantities by the Engineer.  
Waddell . . . . . £6,214 0 0

**NEW MALDEN.**

For Horticultural Buildings exclusive of Heating at  
Coombe Ararat, for Mrs. A. L. Young. Mr. T. L.  
HEWARD, Architect.  
Weeks & Co., Chelsea . . . . . £725 5 0  
Perry, Banbury . . . . . 530 18 8  
Le Gassic & Co., Balham . . . . . 485 10 0  
Lascelles & Co. . . . . 464 0 0

For Remaking and Kerbing, Channelling, and Forming  
the Montem and Penrith Roads for the District Local  
Board, New Malden, Surrey. Mr. T. LOCKWOOD  
HEWARD, Surveyor to the Board, 7 John Street, W.C.

*Montem Road.*

Bath & Blackmore, Clapham . . . . .	£364	0 0
Free, High Wickham . . . . .	272	6 0
Streeter, Croydon . . . . .	250	0 0
Atkins & Bowyer, Twickenham . . . . .	218	10 0
Poulter, Malden . . . . .	217	10 0

Surveyor's estimate of the probable cost, ex-  
clusive of keeping in repair for four months  
after completion . . . . . 153 0 0

*Penrith Road.*

Bath & Blackmore, Clapham . . . . .	310	0 0
Free, High Wickham . . . . .	256	10 0
Streeter, Croydon . . . . .	230	0 0
Atkins & Bowyer, Twickenham . . . . .	212	10 0
Poulter, Malden . . . . .	208	15 0

Surveyor's estimate of the probable cost, ex-  
clusive of keeping in repair for four months  
after completion . . . . . 153 0 0  
E. & W. Iles, South Wimbledon (two roads). 525 0 0

**RAWMARSH (YORKS).**

For the Construction of Upper Portion of Albert Road,  
Parkgate.  
Ward, Parkgate . . . . . £130 0 0  
Bell, Rotherham . . . . . 99 10 0  
Pugh, Rawmarsh . . . . . 96 15 0  
Morton, Parkgate . . . . . 96 0 0  
WAKE, Holmes, Rotherham (accepted) . . . . . 88 10 0

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Lane, Peckham, S.E. Old Blinds Repaired and Taped,  
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**NORWICH.**

For Construction of Water Tanks at the Norwich Asylum,  
Hellesdon. Mr. W. W. LAKE, City Surveyor.  
Read . . . . . £220 0 0  
Bennett . . . . . 133 3 3  
HAMMOND (accepted) . . . . . 166 0 0  
Blyth . . . . . 155 0 0

**SUNDERLAND.**

For Extending Iron Roof over Sunderland Market. Mr.  
R. S. ROUNTHWAITE, Surveyor.  
Jopling . . . . . £699 0 0  
TONKINSON (accepted) . . . . . 634 9 0  
Nelson (slating only) . . . . . 23 0 0  
Engineer's estimate . . . . . 590 0 0

**UTTOXETER.**

For Taking Down and Rebuilding (setting back) Shop and  
Premises, Bridge Street, Uttoxeter.  
J. Ward, Uttoxeter . . . . . £340 0 0  
Yates, Cheadle . . . . . 330 0 0  
A. Ward, Hanley . . . . . 320 0 0  
ADAMS & SONS, Doveridge (accepted) . . . . . 293 17 6

**WELLS.**

For the Erection of Cathedral Grammar Schools at Wells,  
Somerset. Mr. JOHN D. SEDDING, Architect, 18 Char-  
lotte Street, Bedford Square, W.C.  
Merrick & Son, Glastonbury . . . . . £1,160 0 0  
TRASK, Norton (accepted) . . . . . 1,134 0 0

**WITCHINGTON.**

For Materials and Laying Cast-iron Socketed Pipe Con-  
duit, near the Sewage Farm at Chorlton-cum-Hardy,  
and other Works in connection. Mr. J. SWARBRICK,  
Surveyor.  
CLARKE, Hulme (accepted).

**WREXHAM.**

For Construction of Service Reservoir and Filter Beds at  
Gronwen, near Wrexham. Mr. FREDERICK STORR, C.E.,  
Engineer.  
Jenkins & Jones, Rhosyllten . . . . . £4,059 0 0  
Hilton & Son, Birmingham . . . . . 3,759 0 0  
Phennah & Davies, Rhosyllten . . . . . 3,569 0 0  
Samuel, Wrexham . . . . . 3,147 0 0  
Brown, Chester . . . . . 3,052 0 0  
Davies Bros., Wrexham . . . . . 2,986 0 0

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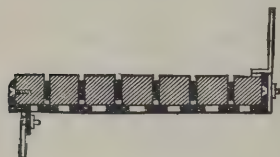
**FOX & BARRETT'S SYSTEM OF  
FIRE-PROOF CONSTRUCTION.  
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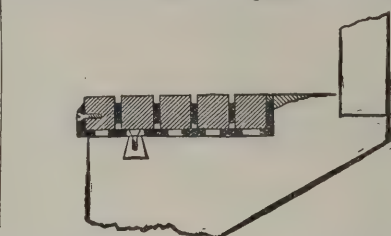
# LINDSAY'S IMPROVED PATENT REVERSIBLE TREADS & LANDINGS FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

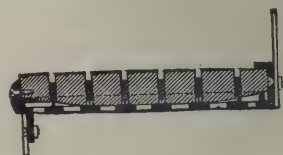
No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

## THE BUILDING PRESSURE ON THE LONDON POOR.—II.



NE thing that would contribute greatly to promote an understanding of the problem how to lodge the London poor is a statistical classification of some sort—even if it were no more than a hasty approximation, provided it were an intelligent one—whereby to show who, and what, and how many these poor really are, where they

live, how they live, what rents they pay and for what accommodation, what occupations they follow, who are their landlords, and perhaps a good deal more, with sufficient comprehensiveness, precision, and minuteness to enable the news-reading public, who read as they run, to discern the common sense of the matter. The classes of poor people with which we ourselves are concerned for the moment, comprise of course only those persons who, living in average honesty one way or another by their skilled or unskilled labour, are, according to their own account, "obliged to live near their work." But, if we mistake not, such statistics would prove that it is the people of these classes alone who, in the first instance, are worthy of public consideration; and indeed it is not improbable that if all such comparatively respectable, if frequently unfortunate, people could by the waving of a wand be at once decently lodged, the remainder would be found to be much fewer in number than some of our philanthropic writers and speakers seem to suppose. In other words, how to reform the dens of the criminal classes, the debauched, the degraded, and the irreclaimably forlorn, is not the real question which now presses for public attention, either in London or anywhere else in the world. It is easy to assert that, if reprobates could be comfortably lodged, their mode of living would improve. No doubt it would. Perhaps the improvement might even to a considerable extent be permanent, for a cleanly home must tend so far to encourage a cleanly life. But there are so many thousands in the heart of London who appeal to us on the much higher ground—leading a decent life already, and only asking for a decent lodging to be in accord therewith, which the pressure of the crowd denies them—that calm men of business may surely be content to consider first how to deal with these, if even thus much be not impossible, and leave to enthusiasts for a time the vastly more difficult question how to deal with the others. The "bitter cry," we are prepared to maintain, is the cry of the very poor working men and women of central London, and not of the habitual drunkards and thieves; and their demand is simply to have wholesome shelter in return for an equitable rent.

If, then, we separate the London poor into the two primary classes of the poor workers and the poor idlers, it is the more easy to perceive how existing legislation affects them practically. By means of TORRENS'S Act, the local Boards of Health—the Vestries doing such duty in central London—are enabled to take summary proceedings against the very worst kind of house property, in order to compel the owners to do such cleaning and repairs, and to make such other amendments as shall render it habitable. If these powers were put in force as they ought to be, the "rookeries," and a good many other lanes and alleys, and even streets, which are not much better constituted, might easily be cleansed and put in order, provided with sufficient sanitary appliances, and occasionally pulled down and rebuilt, so as to be at any rate sufficiently wholesome for very humble tenants; and we make bold to say that it is the fault of the municipal bodies, distinctly and solely, that the worst of the slums are not so far thoroughly rehabilitated every now and then throughout the whole of the metropolis, and this without any expense at all to the public, or any oppressive expense to the owners. There are many experienced persons who hold that TORRENS'S Act is, in fact, all that London really requires in order to relieve it

entirely from the disgrace attaching to house property of the worst description.

The operation of the Artisans' Dwellings Act of Sir RICHARD CROSS may be best regarded in conjunction with the transactions of the PEABODY Trust and other benevolent societies of the same kind. The ground is cleared of unwholesome houses by the process of "compensation," and "Model Lodging-houses" are built in their stead at a certain loss to the public purse. The direct effect of this, as regards tenancy, is to dislodge the disreputable idlers and provide for the workers; but it is everywhere complained that the very poor workers, dislodged with the rest at the beginning, are expressly excluded at the end, and indeed that certain other classes of workers, not poor at all, are brought in to take the place of these humbler people, who are thus driven forth into other slums.

It seems not unlikely that, when Parliament meets, the Conservative party may advocate chiefly the policy of Sir RICHARD CROSS'S Act, and the Liberals that of Mr. TORRENS'S Act. Lord SALISBURY'S dissertation has been replied to by Mr. CHAMBERLAIN in a spirit which indicates this already; and, without in any way desiring to disparage the principle of Sir RICHARD CROSS, or to weaken the effect of Mr. CHAMBERLAIN'S admission that it might have worked sufficiently well but for the professional chicanery of clever compensation surveyors, we cannot help thinking that a persistent system of "pegging away" in detail at the whole mass of rotten house property throughout London under TORRENS'S Act will be accepted by political economists before long as the only effectual means whereby, without loss of time, to put at least a different face upon the existing accommodation of the very poor.

But the pressure of building must still go on ruthlessly; and those poor workers who "are obliged to live near their work" must still be ruthlessly squeezed, and squeezed at last out and away. Here we obviously have to deal with a mechanical and not a sentimental question—a building question in fact—and on that account one which can be fairly taken in hand because it can be scientifically understood. It is, however, even mechanically, a very large question. It is how to provide what may be called new dwellings for hundreds of thousands of deserving working-people—and now we must obviously include a considerable proportion of those who are not of the very poor—to whom it is supposed to be essential that they shall live near their work. It must be borne in mind that London is a "manufacturing centre" of the most busy and complicated character in the world, besides being a "commercial centre" equally complex. The consequence is that hundreds of classes of business, from the leather-market of Bermondsey to the cattle-market of Islington, and from the sugar refiners of Whitechapel to the upholsterers of Bond Street, have distributed themselves in so many separate quarters of the immense town, each settlement regarding its own convenience alone, and demanding elbow-room for its own workers in the form of a sufficient circular space around its own central point. Each of these circles, moreover, is continually expanding. Debateable land between the circles, that is to say, is constantly being annexed. In some instances the enlarging circles have come to press against each other, no one of them inclined to give way to its neighbour. But in all cases it is manifest that the old occupiers of the debateable land, those whose occupation was general and not special, must be undergoing compression to such a degree that they are being squeezed out and away altogether, and that even the special workers within their own circles are being equally compressed, and indeed are only able to retain their ground at the expense of constantly increasing discomfort and deprivation. These are the people—the workers and those who wait upon the workers—who, because as they say they must be near their work, have to complain so bitterly of decreasing accommodation, increasing rent, increasing insalubrity and increasing indecency.

The only scientific remedy seems to be an acceptance as soon as possible of the eventually inevitable principle of the workers working elsewhere. The time must come when the central quarters of London will be, generally speaking, occupied by business exclusively. Each kind of trade or manufacture will then no doubt have drifted into a system of its own, whereby to accomplish the requisite communication with its own retainers at a distance. The telegraph, the telephone, and the pneumatic tube for parcels, will probably figure conspicuously in the arrangement. The additional cost, if any,



must simply be added to the prices of production, and the inconvenience will soon be forgotten. Nothing, it will then be frankly said, could be more absurd than the superstition that a Bond Street tailor or bootmaker could only have his work done in dirty back streets about Golden Square; or a housebuilder by the Strand have his bricklayers and labourers housed of necessity about Clare Market and Drury Lane. The change will of course involve a struggle, but we can only say that the sooner some of the specialist commonwealths begin the struggle the sooner it will be over.

There are some neighbourhoods, although not generally the most central, where the simple expedient may be resorted to of adding another storey to the houses; but of this nothing further need be said, except that what we should like to see in such a case is a diminution of pressure, whereas an increase of numbers would be equally likely to result.

But, first and foremost, we hope the Government, and if necessary the Legislature, will lose no time in forcing upon the lazy local authorities of London a prompt and drastic application of the provisions of TORRENS'S Act.

#### DR. SCHLIEMANN'S TROJA.\*

WHEN we reviewed Dr. SCHLIEMANN'S "Troy and its Remains," in 1875, we declined to join in the almost universal acceptance of his theory. While admitting the remarkable character of his discoveries, it was suggested that much had to be done before Hissarlik could be identified with Troy. Dr. SCHLIEMANN, it was said, entered upon the work with a notion that PRIAM'S city was to be found under the fourth stratum on the hill, and in consequence an insufficient value was set upon the remains in the fourth and superincumbent strata. It was shown that the area of his Troy was inadequate for a large town unless the people were packed in very high houses. "Strange as it may sound," we wrote, "PRIAM'S many-gated city would occupy no more ground than the buildings of the British Museum, and it might readily be enclosed within the railings of either Grosvenor or Belgrave Square." The objections we raised against Dr. SCHLIEMANN'S conclusions could, in fact, be ranged under three heads: First, the difficulty of proving that HOMER'S Troy was a real city, and that it was situated at Hissarlik; secondly, the unscientific character of the excavations, through which the value of objects found in the upper strata was not recognised; and lastly, the smallness of the site. In the eight years which have elapsed, Dr. SCHLIEMANN has worked at Hissarlik on a more methodical plan; he has accepted the advice of a good many English and German scholars, he has from time to time sought the criticism of archaeologists, and he has to some extent modified his theories. What, then, has been the issue of his labours, and is there a nearer approach to unanimity among scholars about Dr. SCHLIEMANN'S identifications than existed a few years ago, when the excitement of his first discoveries had subsided? A study of the new book will enable a reader to answer those questions for himself.

It is to the credit of Dr. SCHLIEMANN that in some matters he has become less convinced than he was formerly of his own omniscience and infallibility. This is evident from his engagement of two architects, Dr. DÖRPFELD, who managed the technical part of the German excavations at Olympia, and M. HOFER, in order, as he says, "to secure for science any light which might be obtained from ancient architectural remains." The former was paid 35*l.*, and the latter 15*l.*, with travelling expenses. Some of the Olympian overseers were likewise employed. We may be pardoned for drawing attention to the fact that one of the first results of the assistance of those experts was to demonstrate that we were right when we condemned Dr. SCHLIEMANN'S treatment of the strata which were not supposed to be Trojan, comparing him to a geologist, who, from having an imperfect knowledge of fossils, threw aside many relics which were of scientific importance. Here is the Doctor's confession:—

My architects have proved to me that, together with M. Burnouf, my collaborator in 1879, I had not rightly distinguished and separated the ruins of the two following settlements, namely, the second and third; that we had rightly considered as foundations belonging to the city the walls of large blocks 2.50 mètres deep, but that we had been mistaken in not connecting it with the layer

of calcined ruins which lies immediately upon these walls, and belongs to the second city, and in attributing this burnt stratum to the third settlement with which it has nothing to do. We had been led into this error by the colossal masses of *débris* of baked, or, more rightly, of burnt bricks of the second city, which in a very great many places had not been removed by the then settlers, and were lying on a level with their house foundations, and often very much higher.

In another place Dr. SCHLIEMANN says that his architects ascertained with certainty the direction of the acropolis wall of the second city. When the exploration was commenced the substructure existed, and was on the north side of blocks which were a *mètre* in length and breadth. "But I had to destroy it," he says, "on this side in 1872 in excavating my great northern trench." It would appear too that the positions of the towers or buttresses could then be ascertained. One of Dr. SCHLIEMANN'S theories was that some great conflagration occurred by which the bricks of the houses of the third city were calcined; but here again professional knowledge has prevailed, as is frankly stated:—

My architects ascertained beyond all doubt that the third settlement never perished in a catastrophe, for the remains of its house walls still stood from 2 to 3 *mètres* high, and its walls of fortification were more or less well preserved. The fourth settlers built their houses on the gradually accumulated ground of the hill, and on the ruined house walls of their predecessors. My architects further found that the fourth settlers used the brick walls of the third settlement, after having repaired them, and perhaps having built them somewhat higher, in proportion to the increased height of the ground.

But the most important result of the improved system of investigation is the abandonment of the theory that Troy was an irregular polygon, of which the longest side was less than 200 feet. In 1875 Dr. SCHLIEMANN said, "I assert most positively that Troy was limited to the small surface of this hill, and that the city had no acropolis." Contrast this positive assertion with the statement in his latest volume: "This second settlement on the hill of Hissarlik constituted only the acropolis, to which a lower city was attached on the east, south, and south-west sides. . . . We cannot determine now with certainty how far the lower city extended." Common sense might have inspired Dr. SCHLIEMANN at an earlier date with the belief that the Trojans were hardly competent to build houses on Mr. HANKEY'S principle, and that, unless they possessed mansions of that kind, they could not live on the top of Hissarlik. The disproportion must have dawned upon the Doctor's mind, for his wish was "to be able to make the plan a thousand times larger;" but his confidence in himself overcame everything, including the laws of arithmetic. It will be remembered that Dr. SCHLIEMANN brought to England some objects in gold and silver, which he maintained were PRIAM'S treasures, and which gave rise to much controversy. He still believes in their value, but there is an important modification in regard to the place where they were found.

It is even possible, he says, that the brick *débris* in which the great treasure was found was the real brick wall. I call particular attention to the fact that for a layman it is next to impossible to distinguish what is Trojan brick *débris* and what Trojan brick masonry; and thus it may be that what I called "red and calcined ruins" was really a brick wall. Nay, it is even in the highest degree probable that the whole space between the western city wall and the large house on the third settlement (which, on account of the wealth found near it, I used to ascribe to the town chief or king) had remained filled with brick *débris* of the second city wall, which had not been removed by the "third settlers."

From this paragraph it may be surmised that Dr. SCHLIEMANN is no longer so sure of the connection between the treasure and King PRIAM. Professor SAYCE, who has written a preface for the new volume, in an ingenious way tries to throw a glamour over the discovery in order that the reader may believe in what was imagined by Dr. SCHLIEMANN in 1872. He asks, "Can we venture to call him?" (*i.e.*, the unknown owner of the trinkets) "the King of Ilion?" Then, in a characteristic way, he begs his own question, saying that "the ruler of the city was a powerful prince who must have had at his disposal the neighbouring gold-mines of Astyra." If we once admit "must be's" and "must have had's," there is no knowing where we may be landed, and they have brought Professor SAYCE very quickly to old Troy. "Hissarlik, then, or Ilion, as we will henceforth call it, must be a city whose siege and conquest became the subject-matter of Greek epic

\* *Troja: Results of the Latest Researches and Discoveries on the Site of Homer's Troy.* By Dr. Henry Schliemann. John Murray.



song." But, for the determination of the age of the treasure, we should attach more importance to a statement by Dr. SCHLIEMANN's architects upon the character of the place where the objects were discovered. It is now plain that the strata were not accurately discriminated in the first exploration, and it would be satisfactory to be assured, on the authority of men who were competent to know a brick wall from brick *débris*, whether the palace of PRIAM, or whatever may be its name, was so situated that relics of a later age could not find their way to it.

With archæologists of the classical kind a few facts go a long way towards building up a theory. Professor VIRCHOW, who had had an opportunity of looking down into the big pit on Hissarlik, described what was below as "a city of gold," on the strength of the "Treasure." In the same spirit the remains of walls and houses are supposed to exemplify a very massive class of building, and, with the help of imagination, they become a part of a city, which, according to HOMER, was "well builded." But what is the true character of the work? So far as we can discover in "Troja," there is not one piece of good masonry or brickwork to be found in that part of the hill which represents Troy. The most remarkable specimen is a substructure wall shown in an engraving, and, according to the description, "it consists of quarry stones, on the average 0.45 mètres long by 25 mètres broad, which are somewhat irregularly joined in easily recognisable horizontal courses, without any binding material." The brick walls are supposed to have been baked or dried after they were constructed, by lighting a fire in the trench at the base; but, according to Dr. SCHLIEMANN, "they must have had a very imposing aspect." Troy was supposed to have been built by NEPTUNE and APOLLO, who were masons rather than bricklayers; but, owing to Dr. SCHLIEMANN's revelations concerning the class of work found at Hissarlik, a theory has been set up by Mr. GLADSTONE and others, by which the gods are interpreted to denote Phœnician builders. In this way the character gained NEPTUNE and APOLLO for good workmanship is preserved.

(To be continued.)

### CURIOSITIES OF THE CENSUS.

ACCORDING to the latest census, the population of England and Wales was 25,974,439. The number of architects, including pupils and assistants, was 6,898. There is consequently, taking the average of the country, one architect, or member of his staff, to 3,765 inhabitants. As there were 7,124 civil engineers, the relative proportion to the population of the members of the two divisions of constructive science is nearly alike. If architects are compared with other artists, there are somewhat fewer painters, the number being 6,082 (including 1,880 females); there are 816 sculptors (16 being females), and 2,201 engravers (64 being females). It is remarkable that the number of architects nearly corresponds with the number of people who have adopted literature or science as a profession—viz., 6,830. But if compared with the members of what are called the learned professions, architects are in a minority. England and Wales possesses 33,486 clergymen, priests, and ministers, 17,386 barristers and solicitors, and 15,091 physicians, surgeons, and general practitioners. The difference is more remarkable, for students are included among architects, and come under a separate category in the other professions. Whether it is an advantage for a State to have so few architects we do not presume to determine; but if men were perfect they could dispense with clergy, lawyers, and doctors; while, unless the climate were transformed, they must have houses, and therefore architects. The number of pupils may be inferred from a consideration of the ages of architects. There are 23 who are put down as being five years old but less than fifteen, 847 are under twenty years, 1,378 are under twenty-five years, 3,187 range between twenty-five and forty-five, 1,251 between forty-five and sixty-five, and 212 architects are described as being sixty-five and upwards. Probably about 4,000 have a claim to be recognised as architects. It is gratifying to know that among the blind there are only two architects, and but one architect among the dumb.

The foreigners, who are included with English and Welsh architects, are not numerous. We have one Dane, one Swede, three Swiss, four Germans, and four Frenchmen. The painters

have not only a greater number of those nationalities, but there are also artists from Norway, Russia, Poland, Austria, Hungary, Holland, Belgium, Portugal, Spain, Italy, Greece, and even from Turkey. Europe is thus well represented in England, for, as DRYDEN says, "the pencil speaks the tongue of every land."

If we inquire in what proportion architects, assistants and pupils are distributed over the country, we find that nearly one-third—that is, 2,067—are to be found in the metropolis; the south-eastern counties (Surrey and Kent [extra metropolitan], Sussex, Hampshire, and Berkshire) have 834; the south midland counties (Middlesex [extra metropolitan], Hertfordshire, Buckinghamshire, Oxfordshire, Northamptonshire, Huntingdonshire, Bedfordshire, Cambridgeshire), 404; the eastern division (Essex, Suffolk, Norfolk), 198; the south-western counties (Wiltshire, Dorsetshire, Devonshire, Cornwall, and Somersetshire), 254; the west midland counties (Gloucestershire, Herefordshire, Shropshire, Staffordshire, Worcestershire, Warwickshire), 555; the north midland counties (Leicestershire, Rutlandshire, Lincolnshire, Nottinghamshire, and Derbyshire), 346; the north-western counties (Cheshire and Lancashire), 1,039; Yorkshire, 696; the northern counties (Durham, Northumberland, Cumberland, and Westmoreland), 336; finally, Monmouthshire and Wales have 169. It will be evident that the divisions which contain manufacturing towns have more architects than those which are mainly agricultural. The following figures will suggest the relative importance of provincial towns—from an architectural point of view: Liverpool, 103; Manchester, 99; Leeds, 94; Birmingham, 75; Nottingham, 72; Newcastle-on-Tyne, 68; Bristol, 65; Sheffield, 63; Bradford, 57; Leicester, 55; Birkenhead, 48; Salford, 47; Derby, 44.

If we assume that there are 6,898 persons who are practising as architects and architects' assistants, and that they were given an equal share in superintending builders, it would follow that every one of them must direct about one hundred workpeople. The number of persons who are engaged in working at houses, furniture, and decoration is 786,660, but 101,066 are assigned to furniture, and 18,856 to decorations, thus leaving 666,738 for houses. The building trade (including furniture and decoration), if judged by the census only, thus holds an important position among the occupations of the English people. It is, in fact, the sixth. The ratio between it and the entire population is as one is to thirty-three, or in other words, out of every hundred people in England and Wales at least three will have something to do with the building, furnishing, or adornment of houses. The industries which are represented by larger numbers are those relating to domestic service, minerals, agriculture, textile fabrics, and dress. The position of the trade is a comment on what has been said by QUETELET, that "the classification of professions indicates the means by which a people provides for its subsistence and augments its prosperity." The numbers engaged in the building trades are as follows:—

Total for England and Wales.		Total for England and Wales.	
Builders . . .	30,564	Plasterers, white-washers . . .	28,800
Carpenters, joiners . . .	235,017	Paperhangers . . .	4,177
Bricklayers . . .	125,055	Plumbers . . .	37,160
Masons . . .	97,432	Painters, glaziers . . .	99,676
Slaters, tilers . . .	7,469		

We have not included the females who are set down as being engaged in these trades. They amount in England and Wales to 1,388. The conditions of building vary so much in different towns, it is impossible to fix a normal proportion between the trades. This will be plain from a comparison of the statistics from London, Liverpool, and Birmingham:—

	London.	Liverpool.	Birmingham.
Builders . . . . .	7,319	403	553
Carpenters, joiners . . . . .	38,102	5,597	2,881
Bricklayers . . . . .	23,222	1,915	2,829
Masons . . . . .	7,502	1,501	476
Slaters, tilers . . . . .	754	282	227
Plasterers, whitewashers . . . . .	6,699	1,294	462
Paperhangers . . . . .	1,797	368	96
Plumbers . . . . .	7,477	1,616	406
Painters, glaziers . . . . .	28,084	3,130	1,976

Birmingham has nearly as many bricklayers as carpenters and joiners. There are 50 per cent. more bricklayers than in



Liverpool, with about one-half the number of carpenters. Neither town corresponds with London. Taking the entire country, the carpenters are numerically the most important branch of the building trade; but in some towns, such as Brighton, Ipswich, Norwich, Plymouth, Bath, Wolverhampton, the equality between the numbers of carpenters and bricklayers or masons corresponds with that of Birmingham.

### PARIS NOTES.

THE city architects, MM. Ballu and Deperthes, have laid before the Municipal Council a project for completing the decoration of the Place de l'Hôtel de Ville, which consists mainly in carrying into definitive execution the plan of temporary decoration adopted last year on the occasion of the opening of the new Town Hall. The chief features of this, it may be remembered, were two fountains on the open square and a monumental balustrade in the form of a hemicycle, bearing numerous statues, and surrounding the approach to the central door leading into the Cour Louis XIV. In the scheme now under consideration the fountains will be of imposing size, each surmounted by an allegorical group, and the basins ornamented with figures of children, garlands, sculptured heads, &c. Round the approach will be erected a number of *rostra*, surmounted by lamps, and on each side two large seated figures to represent *Commerce* and *Industry*. The total cost is estimated at 735,000 frs. This money will almost certainly be voted, for the Paris Municipality appears to stick at no expense in the embellishment of its own abode and surroundings. In the Hôtel de Ville, the Salle Saint-Jean, one of the finest rooms of the new building, has within the past few days been entirely cleared of working paraphernalia, so that its noble proportions and artistic decoration may be clearly seen.

The lower or subterranean portion of the great Eglise du Sacré-Cœur, now rapidly rising on the heights of Montmartre, is almost entirely finished. The centre of this underground cathedral is occupied by the Chapelle des Morts, which was opened with great ceremony on November 1, All Saints Day. In the centre of this chapel, directly under the future site of the high altar in the upper church, the venerable Cardinal Archbishop of Paris, the originator of this monument to the memory of his martyred predecessor, has expressed a fervent desire to be interred. The gallery surrounding the chapel is occupied by six oratories, erected solely by donations from the towns of Nancy, Rodez, Nevers, Saint-Claude, Orleans, and Toulouse. Exactly at the central point of the underground apsis is a grand altar dedicated to St. Peter, around which are arranged seven other chapels, completed as far as the construction is concerned, but not yet decorated. Work on the upper church is being pushed on with the utmost activity; and by the end of the year the side walls and pillars will be finished up to the capitals. Thirteen million francs have already been expended, and it is estimated that at least another ten will be required for its completion.

The Trouillebert-Corot and Daubigny picture frauds have had one good result. Many influential artists and amateurs are engaged in founding an association which will furnish information and certificates respecting the value and authenticity of the works of contemporary French artists. Pictures will be sent in to the society, and after a careful examination by the first experts of the day, a stamp will be affixed to the canvas, and the work will be registered under a number in the books.

The Société Libre des Artistes Français have decided to propose to the managing committee of the Society of French Artists that for the future (1) the voting papers in the election of medallists shall be signed; (2) that the Grand Medal of Honour shall be voted by all the exhibitors; and (3) that the number of medals shall be unlimited. M. de Gatines, the secretary of the younger body, has been charged to communicate on the subject with M. Bailly, the president of the Société des Artistes Français.

The Tribunal de Commerce, at the corner of the Boulevard du Palais, facing the river, possesses one of the most spacious and magnificently decorated chambers of audience in the world. Two large panels on the walls contain historical paintings representing, one, *Napoleon I. giving the order to promulgate the Commercial Code in 1807*; the other, *Napoleon III. and the Empress attending the Inauguration of the Tribunal of Commerce*. The pictures are quite appropriate to the place, and as they refer to historical

events, one would have thought it impossible that they should offend the susceptibilities of anyone. A majority of the Municipal Council have, however, voted the removal of these pictures, and charged one of the standing committees with the choice of the subjects to be substituted for them. It must be said, however, that many even staunch Republican members of the body both protested and voted against this piece of vandalism.

At the last sitting of the Commission of Historic Monuments, held under the presidency of M. Antonin Proust, the Hôtel de Ville of Saint-Armand (Nord), of sixteenth-century architecture, and the church of Ecrouves (Meurthe-et-Moselle), dating from the end of the twelfth century, were classed among the protected buildings. Various credits were also voted for repairs to the churches of Helment (Puy-de-Dôme); Celles (Deux-Sèvres); Marennes (Charente-Inférieure); Saint-Jacques de Dieppe (Seine-Inférieure); Villeteire (Oise); and Saint-Restitut (Drôme).

The annual exhibition of the Union of Lady Painters and Sculptors is announced to be held from February 15 to March 15 of next year, at the Palais de l'Industrie, in the same rooms as were occupied last spring.

The committee of the Taylor Society has adopted a proposal of M. Roger Ballu to organise an exhibition of "Sketches by Modern Masters," to be opened at the Ecole des Beaux-Arts on February 1 next, immediately after the Manet exhibition. No effort will be spared to make the collection as universal as possible. Among other great artists, David, Géricault, Delacroix, Ingres, Millet, and Rousseau will be particularly well represented.

A conflict has arisen between the Chapter of the Saint-Denis Cathedral and the Commission of Historic Monuments. The latter demands the suppression of the charge of one franc made for the admission to visit the interior of the building, on the ground that as the church was restored at the cost of the State it should rank as a national museum from the artistic riches it contains, and so be open free. The Chapter, however, refuses to abandon the charge unless the State indemnifies it for the loss of the 2,500 frs. a year at present realised therefrom. The question will be brought before the Chambers, and the Minister of Public Worship will be asked to exercise his authority to put an end to this ecclesiastical pretension.

Aimé Napoléon Perrey, a well-known sculptor, has just died at Pont-de-Roide (Doubs). Among other works executed by him are the sculptures in the church of Belleville, three statues on the portico of Sainte-Clotilde, those of *St. Martha* at Saint-Augustine's, *St. Paul* at the Sainte-Chapelle, &c.

### THE BUILDING TRADES EXHIBITION AT BRISTOL.

THE above exhibition was opened at the Rifle Drill Hall, Queen's Road, Bristol, on Monday last, much interest being shown in the enterprise, as it is the first occasion on which an exhibition under this title has been held so far west. The space available has been found inadequate to meet the demands of many intending exhibitors.

Messrs. ASHTON & GREEN, Temple Gate, Bristol, have a very attractive display of chimney-pieces of the purest statuary and other marbles, which are fine specimens of skilled workmanship and artistic design. This firm also show a bath fitted with a marble casing of elaborate design.

Messrs. CASHMORE & CO., Victoria Street, Bristol, contribute several good samples of cut glass, some of which are on order for the Rajah of Bhawalpoor, a large number of plates having already been shipped there. They have also manufactured cut plate for the corridor leading to the throne-room at Buckingham Palace.

Messrs. ALFRED GARDINER & SONS, of Nelson Street, Bristol, display is a capitally-arranged one in eight divisions, representing various departments of their business. One section contains some very elaborate examples of wrought ironwork of their manufacture, also some fine hammered leaf-work and flowers. Our attention was, however, more particularly directed to a selection of their wrought-iron mitre-joint sashes and casements, made so as to form combined sashes and guard-bars, being specially suited for lunatic asylums, reformatories, and all buildings where security is desired with the least possible obstruction to light.

Messrs. ARTHUR LEE & BROS., of Canons Marsh, Bristol, have some good specimens of carving in monumental crosses made of Sicilian marble. In one a wreath of roses is twined round the cross; the carving is in bold relief, and has been delicately manipulated. One of their chimney-pieces is of statuary marble, with *St. Sylvester* panels. But the great feature of their show is



the novel and successful manner in which they have treated enamelled slate, specially prepared, which they term "Anti-Lignum," and this is displayed in two chimney-pieces made of the material, in the manufacture of which all idea of imitating marble is abandoned. The contrast between the appearance of slate so treated and of wood chimney-pieces is marked. Mr. W. E. Jones, F.R.I.B.A., of Bristol, supplied the designs from which the work has been carried out.

Mr. J. C. STOCK, 8 Victoria Street, Bristol, shows some artistic wall papers, including a new Teele paper and Wistaria decoration. The latter is in two shades, and is suitable for drawing-rooms, and a peacock-blue is more adapted for a dining-room. There are also some choice patterns of Japanese leather paper. In the cheaper kind of paper-hangings the new sanitary washable papers are sure to find favour and to be in great demand.

The Willesden patent metalline waterproof paper and canvas is shown by Messrs. MARDON, SON & HALL, of Milk Street, the agents, and appears to give unqualified satisfaction. It can be applied to many uses, and it is likely to rival more expensive fabrics.

Messrs. H. W. COOPER & Co., Limited, 28A Upper George Street, Edgware Road, exhibit their well-known glass revolving circular and sliding ventilator, and their improved glass Louvre and Venetian ventilators. Good specimens of a new patent are also shown, by which any design of lacework, flowers, &c., can be reproduced on glass.

The Patent Asphyxiator, for applying the smoke test to defective drains, soil-pipes, &c., for fumigating greenhouses and disinfecting rooms, bedding, &c., is shown by Messrs. JOHN WATTS & Co., Broad Weir Works, Bristol, the patentees and sole manufacturers. It is a very simple and portable invention, and has been adopted by many of the sanitary authorities and medical officers of health in the kingdom. Orders on a very liberal scale are being received from New York and other Continental places, and architects should recognise the importance of specifying the testing of drains by this process.

Messrs. SMITH, POWERS & Co., Priory Varnish Works, Coventry, besides showing their principal varnishes largely used by builders, house and church decorators, draw particular attention to their "Terebine," a liquid dryer for varnishes, paints, &c.

Marble mosaic flooring in various designs is shown by Messrs. DIESPEKER & Co., 40 Holborn Viaduct, to whom were awarded the gold medal at the late International Exhibition at Amsterdam.

Joinery is well represented by the stand of a local firm, Messrs. BROCK & BRUCE, the excellence of whose productions are known in many distant parts of the world. We understand this firm were entrusted with the contract for supplying the carving and putting up of all the woodwork used in the restoration of Bath Abbey some time back.

The exhibits of Messrs. JOSEPH BELL & SON, College Green, include designs of stained glass windows executed at Bristol Cathedral, Bath Abbey, Clifton parish church, Stoke Bishop church, and other places; and also for screens, doors, &c.

Captain PAPIER, 34 Church Road, Islington, is again to the fore with his "Zenith" Patent Air or Steam-screw Ventilator, the principle of which our readers are doubtless well acquainted with, as we have on other occasions described it. We are pleased to hear that it is getting into favour with architects, builders, and others.

THE ANTI-LITHON COMPOSITION COMPANY, No. 11 Lawrence Hill, Bristol, exhibit their speciality under this name for owners and users of steam power, claiming for it a pre-eminence on account of its being a pure vegetable extract not containing soda, muriate of ammonia, alkali, or any kind of mineral acid. It is stated that its action in the boiling water is different from any other article yet invented, as a portion of the ingredients having a great affinity for iron and all kinds of metals, it fixes itself to the plates and tubes, and thereby forms a fine, soft film or glassy surface, which preserves the skin of the iron.

THE BOWER-BARFF RUSTLESS IRON COMPANY, 23 Queen Victoria Street, London, E.C., have a numerous collection of general builders and sanitary castings, such as rain-water pipes, gutters, heads, shoes, &c., treated by this process.

Mr. ALEXANDER DICK, 110 Cannon Street, London, E.C., has on view many finished articles in his new Delta metal. This remarkable material is an improved brass, but is much superior to it. It can be made as tough as wrought iron, and as strong and hard as mild steel. It can be forged, stamped, or rolled hot, and will stand being worked and drawn into wire when cold. Its colour resembles that of gold alloyed with silver; it takes a high polish, and when exposed to the atmosphere will tarnish much less than brass. The price of Delta metal is but little more than that of best brass. Its great strength, durability, and hardness recommend it for all kinds of engineering work, whilst its fine, rich colour has already secured for it a market in cabinet work, harness and carriage fittings, &c., &c. We confidently anticipate for the invention an almost illimitable field of usefulness, seeing that there is hardly any metallic article which may not be advantageously made from Delta metal.

In gas-engines there is a 1 horse-power "Turner," working one of Baxter's 12 inch by 8 inch patent knapping motion stone-breaker

on wheels; a "Universal"  $\frac{1}{2}$  horse-power, by Messrs. T. B. BARKER & Co., Birmingham, driving a boot manufacturer's one-man eccentric sole-cutting press, 25 inches by 26 inches bed; a "White's" 1 horse-power, driving a dynamo electric machine for 10 Swan lights.

Mr. GEORGE JENNINGS, Palace Wharf, Stangate, S.E., has by far the most complete show of sanitary appliances, including his well-known valve-closets, urinals, lavatory basins, &c., &c.

Messrs. HODKINSON & CLARKE, Canada Works, Small Heath, Birmingham, have their usual extensive collection of Continental window-blinds, Venetian blinds, stained and painted glass for all purposes, fireproof screens for theatres, &c., &c., much interest being shown in their revolving partition as applied to school-rooms, for the division of the large rooms into class-rooms, for cupboards, cabinets, libraries, &c. Particular attention is given by this firm to school furniture, and it is pleasing to know with very marked success.

Mr. P. PFLEIDERER, 86 Upper Ground Street, is here demonstrating the advantages of his "Universal" kneading and mixing machine. The principle of the machine is one of revolving discs, so ingeniously contrived that in action they effectually traverse the whole area within, and thus subject the substances placed there to a thorough blending and kneading unattainable by any other means. The working of this machine is most simple. For bread-making alone it has gained a notoriety for excellence by many well-known firms. It is equally adapted for builders, engineers, paint and putty makers, and many others. We can strongly recommend architects and others to become fully acquainted with the many advantages of this machine. Stauffer's patent lubricators are also shown at the stand. These are extremely simple, and consist of two parts—a lower part, which is screwed on to the bearing of the pulley, &c., and an upper part, forming a cap, which is filled with a suitable lubricant. The advantages claimed are—a saving of about 90 per cent., perfect cleanliness, reduced wear of bearings, saving in time, &c. We certainly think it a good article.

Messrs. JOSIAH WEDGWOOD & SONS, Stoke-on-Trent, through their agent, Mr. J. O. Bessele, 12 Bridge Street, Bristol, exhibit some patent impressed pattern tiles, enamelled decorated tiles, printed tiles, &c., suitable for wall decoration, dados, friezes, fire-places, stoves, &c. The impressed pattern tiles are produced by an improved method, which obviates the necessity of the use of expensive moulds and dies. The chief character of this decoration is that at a small cost and saving of time, the architect's own drawing can be reproduced with the most minute exactitude both in design and colour.

At the stand of Messrs. PRICE, SONS & Co., of the Old Stoneware Potteries, Bristol (established so far back as 1740), is to be seen a potter's wheel at work, a source of much interest to the visitors. Apart from this the firm are noted for their stoneware goods.

THE FISHPONDS AND BEDMINSTER BRICK AND TILE COMPANY, who have offices at Albion Chambers, Bristol, display some durable facing bricks in several colours, also culvert, fire, and stable bricks. Roofing tiles and common bricks are well represented in large variety and number. From the weekly increasing output by this firm they should have but little cause to complain.

THE CATTYBROOK BRICK COMPANY, LIMITED, have a large collection, which includes red and white pressed fancy bricks, red wire cut fancy bricks, common stock bricks, blue bricks, pitching bricks, vitrified stable bricks, &c., &c. As a proof of the durability and appearance of the Cattybrook bricks, they have been very largely used in churches, chapels, schools, almshouses, factories, and warehouses built in Bristol and neighbourhood.

Another very attractive display is that of Messrs. CORFIELD & MORGAN, Enamelled Slate, Marble, and Monumental Works, Cardiff. Included in their exhibits we notice a very finely-carved statuary marble chimney-piece; also one with inlaid painted panels, representing pastoral scenes; an enamelled slate chimney-piece, in imitation of Morris's green, with griotte inlays and black mouldings, all of which are fitted with grates, tile hearths, and fenders to match. This firm is evidently able to hold its own in the question of low prices.

Messrs. KING & Co., of the Western Electrical Works, Bristol, have a very varied collection of apparatus, manufactured and used by them. At one point a Wimshurst influence machine is shown; also electric bells of every size and description. At present this firm cannot execute their orders fast enough, a very good sign of the quality of their manufactures.

We should not omit to mention that Messrs. CLARK, BUNNETT & Co., of Rathbone Place, London, exhibit ornamental iron stair-cases, lifts, and revolving shutters of well-known excellence.

We may add that the exhibition is likely to prove a success. It closes on the 8th inst.

The Royal Opera House in Stuttgart has been entirely rebuilt, provided with iron drop screen, electric light, steam-heating apparatus, and reopened. The total cost of the new building will be about 35,000*l.* sterling.



## THE CALCUTTA EXHIBITION.

THE Art Work Association at Kandy, in Ceylon, have raised a voluntary loan in order to secure the proper representation of Kandyan art at Calcutta, and the following brief sketch from the Ceylon papers of the articles which have been already sent with this object may not be without interest. The principal objects are those in the pottery known as "Embekke ware." There will be a considerable collection of the already well-known shapes and patterns, such as the large and small chatties and bowls, the plates, and the goglets. Besides these, there will be two series of large tiles of considerable curiosity. One consists of twenty scenes from the great annual perahera, as it is carried on at the present day. Every detail of the procession is accurately depicted: the costumes, flags, censers, elephant trappings, and musical instruments are "from the life;" even the omnipresent policeman is not omitted, and many of the headmen are very passable portraits. This is the first time that this remarkable ceremony has been illustrated in detail. The second series represents a story of very great antiquity, preserved in the Pali language, known as the "Dharma Sonda Vathu," or the tale of "the king who was intoxicated with the law." It consists of eleven pictures in all, and depicts, by means of an allegory, the severe struggle between early Buddhism and triumphant Brahminism. Every detail of the figures, scenery, and incidents is in strict accordance with the directions contained in a curious old Sanskrit "ola," in the possession of the Embekke family of painters. A third series of smaller tiles represents what are known as the "Nawa Nari Kunjari" designs, in which the figures of from four to nine men or women are ingeniously worked into the shape of a horse, an elephant, a bandy, a flower vase, &c. There will be a good selection of brass work, Kandyan swords and knives, Dumbaramats, lacquer work, and ivory carving; but, next to the pottery, the silver work will be the most important exhibit. The five best workmen are each making a large silver "heppuwa" of 20 rupees weight, the design being left to their own choice. There will also be a pair of handsome silver card trays and patens, and a good show of "heppuwas," chunam boxes, and "Ratemahatmaya" spoons.

## "THE HOUSE BEAUTIFUL."

A LECTURE entitled "The House Beautiful" was delivered last week in Dublin, by Mr. Oscar Wilde. The lecturer said he did not desire, even if he were able, to give any abstract definition of the word beauty. They could get on without philosophy of that kind if they only surrounded themselves with beautiful things. When he said that everything in the house should be beautiful he was not preaching any mere poetic dream. There had been many times and many countries when everything made by the hand of man was beautiful, from the stately palace with its gorgeous tapestry and splendid carving, down to the simple house of the honest yeoman, that had at least outside its plain or decorated plaster between broad oak beams to uphold the roof, and within its bright and pretty painted oak. Then our beautiful remains of Celtic art, including both carved work and illumination, were essentially decorative, because they dealt entirely with form and colour without any imitation. Surely the spirit should not be in the slightest degree dead amongst them, although it may have been repressed; for, suffering as their country had, a very Niobe amongst nations, all her artistic power had gone almost entirely into poetry. The question was, was it possible again to elevate handicrafts so that every one of them would become an art? Until people recognised that to make the smallest bit of ornament that ran round a room or formed the design of a carpet the greatest delicacy of hand and the greatest refinement of imagination were required—until people recognised that there was no nobler profession for young men or women than any one of those simple decorative arts, they might have art as a mere fashion amongst them, but never as really strong and natural born, as they desired it to be. They should not imagine that he was about to prescribe any particular form of decoration. They must recognise how absolutely various all taste was. But it was not sufficient for people to say that they knew what they liked. It was far more important to know what to like, and the desire for beauty being, he could not but think, natural to every one of them, all he could hope to do was to lay down a few general principles which lay at the base of all art in order to enable them to have something better in the shape of decorative art than a nineteenth-century house. Mr. William Morris, whose name as a poet and a handicraftsman was familiar to many of them, had been in the habit of laying down some very sensible rules to people about to furnish houses. One was—have nothing in your house that you do not either know to be useful or think to be beautiful. If that rule were followed out, what a lot would be got rid of. The wax peach would no longer repose under the glass shade, and endless macassars, reminding one of an eternal washing-day, would disappear even though nothing absolutely artistic took their places. Mr. Morris's second rule was—have nothing in your house that you do not feel must have been a joy to the man who made it, and

that you do not know is a joy to you who use it. That second rule struck at the root of all that was beautiful in art. The whole meaning of ornament was that some noble-minded man or woman, having felt the beauty of the world about us, must needs convey to others in the work of his hands the joy and delight that that beauty had given him. Mr. Morris's third rule was—not to imitate one texture by another; for example, not to paper a hall to make it look like Sienna marble. Mr. Ruskin laid great stress on the ethical side of art, declared that it was extremely immoral for people to have anything of the kind—that it really put the master of the house in the position of telling a falsehood to everyone who came to see him. He (Mr. Wilde) was not sure that he took exactly such an ethical view. The morality of art was merely beauty—its immorality, ugliness.

As regarded the style of architecture for private houses the Gothic was the most beautiful and best, because it allowed the most freedom. The Classical condemned them to square windows, whereas in the Gothic they could have square, round, pointed, or all three. They could have also a little turret without any necessity for monotonous symmetry interfering. If they worked in red brick it afforded more opportunities for pleasant decoration than almost any other material. Broad lines of colour were effective. The Venetians in their palaces used broad bands of colour with large shields of marble let in between them: but of course they did not want marble—brick would give them as much colour as they wanted. Beautiful colours and beautiful proportions were what they wanted. Absolute ornament was secondary, and should follow afterwards. If their house were beautiful in its scheme of colour and graceful in its proportions, it would surely be a pleasant house to live in. As to the hall-door, a polished brass knocker was better than a blackleaded iron monstrosity. The door itself should not be painted to imitate any other wood, grained like oak or walnut, but treated in colours. He should not paper the hall, but should rather wainscot it or use matting. The hall was not the place for pictures. A good picture should hang only where people had quiet and time to enjoy it, whereas people were always rushing into halls with umbrellas, and out of it to catch trains. As regards rooms, assuming that they had the modern whitewashed square box that was so often left in their hands by the builder, and that they had to decorate it, what was the first thing to think about? The colour scheme according to which they proposed to decorate it. Don't ask him, as many people did, "What was the artistic colour?" There was no such thing as an artistic colour; all colours were equally beautiful. Colours lay before the decorative artist exactly as the keys of a piano before a musician. One note was not lovelier than another, but certain combinations of notes and certain harmonies were beautiful; and so it was with colours. But it was to be remembered that the most valued colours in decorative art were the gradated colours—those that were just passing from one primary colour into another. An artistically decorated room was not a gloomy room done in sage-green, which, he was sorry to say, was the idea many people had. Nothing of the kind. The decorations should be as bright and joyous as colour and texture could possibly make them. But how were they to get that bright effect? If they looked at the old stained-glass window of some great cathedral, or at a Persian carpet, they would see that the effects were produced not by using the primary colours to excess, but by the proper use of neutrals, such as white, black, and grey, which, properly blended with the primaries, produced effects as wonderful as those in a peacock's tail. The bright colours should be set like gems through the others. Such combinations produced the splendour they had in the workmanship of the East, while Europe only gave them glare. Gold was often used as a colour, whereas it should only be employed as a neutral. The most beautiful room was, he thought, the low room. If the walls were too high, their height could be apparently diminished by broad horizontal lines, of course not dividing the wall into two equal halves. There might be a frieze above and a dado below, but not all three unless the wall were very high. The dado was of practical use to preserve the wall from being injured by the furniture, and therefore he thought the best dados were of wood rather than paper. Remember that in most cases the wall was a background. The paper should be of a very low note of colour—dull greens, with a little red, and so on. Their highest notes of colour should be reserved for their more delicate textures. If they made their wall very brilliant, they would have struck their finest note at once, and the wall would have ceased to be a background, and become a decorated foreground. The highest colours should be reserved for their beautiful porcelains and delicate embroideries. As regarded the wall surface and the choice of paper or distemper, he did not speak against paper. Many good artists now designed beautiful wall-paper. But it was not the only method of covering a wall. Provided they kept the colours right, the room would look well, no matter if the material were only deal or plaster. He could hardly conceive a room too low to be beautiful; but if they thought it was, the way to get height was to have decorated vertical panels in the walls. As to the texture of the panels nothing could be more beautiful than many of the very lovely poplins that he was glad to say they were still making in Ireland. The old poplin of fifteen years ago was a little too thick and coarse



n texture to fall well in folds. That was entirely changed now. They had a beautiful texture, while the mixture of wool with silk gave durability, which was desirable, as the panels could not be changed every day. As to the frieze, they should never have it of paper; gold-stamped leather would always look better. With respect to the ceiling, what a problem came before them! What were they to do with the glaring white plaster? What was wanted in a ceiling was a raised surface, which would break up the light. Many old houses in Dublin had beautiful ceilings; some, he believed, from designs of Angelica Kauffman. Such designs were a beautiful art which we seemed to have forgotten.

As regarded windows, a good many architects seemed to treat a house as if the rooms were not intended for reading, quiet, or conversation, but for conservatories. There were such enormous windows with plate glass panes, as if the people in the street had nothing to do but look into the house, and the people in the house had nothing to do but look into the street—both being, of course, extremely bad habits. Such windows let in a glare that had the same relation to light as noise had to music. To stop this glare the upholsterer was applied to, and he came and erected across the top of the window a pole as big as a ship's mast. At each end of the pole he put a sort of gilt pineapple, and from heavy gold rings hung down curtains so low that they had to be looped up. That was an error. They should not touch the ground. Again, any decorations on the curtains should be horizontal or transverse, in order that the folds might form graceful curves. The panes of glass might be of any form, but they should be small; stained glass should be more frequently used than it was. He did not mean those dreadful, transparent, lithographic pictures that came from Germany, and particularly Munich. A stained glass window had nothing to do with being a picture. It should be a coloured design. There was no necessity for the large curtain pole; a mere rod would suffice. Then, what were they to do with the dreary, white marble chimney-pieces with machine-made curves? It would be clearly immoral to sell them, for they should never ask money for what was ugly. It would be equally immoral to give them away, for they should not wish any of their friends to possess what was ugly. If they could not get rid of such a chimney-piece, they might paint it, or adopt the Italian method of incised lines with coloured cement between the interstices. As regarded the fireplace, one could take many a pleasant lesson from the farmhouse, where one often saw, instead of the ugly black-leaded cast iron or polished steel fender, a nice brass one. The more brass and copper one got near the fire the better, because it reflected every flicker of the burning embers. They did not want "Tintern Abbey by moonlight" upon the front of their coal-scuttles. A plain brass scuttle was sufficiently beautiful. He should never have elaborate designs in any tiling near the fire, because one should never put design, particularly figured design, where it was liable to be spoiled. For the back of the grate he should not have tiles—the heat was too great—but good cast-iron. They should not be alarmed by all that Mr. Ruskin had eloquently said against cast-iron ornament. It really was not ugly when used properly. Many beautiful objects ornamented in very low relief were fashioned from it. From Japan, for example, came pretty little kettles, with the most delicate and fantastic designs. In Japan, too, with splendid recklessness, the moment they had cast one design they broke the mould, and thus prevented that indefinite repetition by machinery, which was one of the sad things of modern times. As regarded the mantelpiece itself, he thought it had better always be carried up to the ceiling, with little shelves of wood on each side (the panels being filled in with decoration), to store Venetian glass and delicate ornaments. It was good always to carry at least one thing in a room up to the ceiling. In the centre of the mantelpiece they could have a pretty circular mirror, or an oblong, or square one, with bevelled edges. Do not have that huge, plate-glass mirror, with its very grave, gold ornamentation. Artistically it was bad, because it reflected the ugliest part of the room—the ceiling; a fantastic glare was created: your lines were spoiled and your colours tarnished. Then, of course, it was extremely bad for people's vanity to be always looking at themselves in these gigantic looking-glasses.

Then, as regarded furniture, they had a choice. He would not limit them to any era or age. The Gothic was beautifully made and solid, and a great deal of it was finely carved in its own day; and in a large and stately house it was always in place. But in the houses of simple, refined people very often it looked heavy. A great deal of it seemed to belong to a very warlike age, when people felt it was an advantage to have furniture that might be used as weapons of defence. What they wanted was furniture made by refined people for refined people, furniture which would not weary them with ornamentation out of place, but which would grow more beautiful the longer they had it. How sad it was that decorative art should have fallen into such disgrace; that a new word had to be invented—"secondhand"—which meant that the moment you bought a thing it began to decrease in value, until after eighteen months it was worthless. If beautifully made, the thing ought to increase in value and beauty the more one used it. When you got a modern imitation of the work of Louis Quatorze there was very little beauty about it. He did not think gold furniture, in its texture and exaggerated curves, was suited to use; and

the fault of Louis Quatorze's furniture was that its curves were always exaggerated. In a beautiful curve one hardly perceived beginning or end; it was the course of an ellipse rather than of a circle. Furniture having exaggerated curves could not last long, because the curves were made by cutting against the grain, which weakened the wood. The furniture of the First Empire in France and some in Holland were made by refined people for refined people; it did not weary with ornamentation. Ornamentation should be kept for sideboards, bookcases, and state pieces.

They would be quite right to subdue their decoration to their pictures, if they had good ones. Mediocre pictures were worse than bad ones, and, without any intention of speaking against pictures, he urged that beautiful embroidery, lovely porcelain, delicate metal-work, ivory, Venetian glass, were far more decorative than mediocre pictures, and did not cost one-fiftieth as much. In hanging a picture do not be led astray by the subject, but consider, "Is this picture beautiful in line and colour—is it a lovely decorative?" If so it would look well. The first thing a picture had to do was to be decorative, and to affect one by colour and form. Engravings were decorative, but never have a white ground to them. Etchings were extremely decorative. Photographs of natural scenery he certainly thought were really decorative and very fine in a portfolio, but he should not hang them on walls. If anything could prevent one going to Switzerland it would be the photographs of the valley of Chamouni one sometimes saw. But there were artists who photographed well; and he had seen hanging on walls good photographs of pictures by Velasquez. As to photographs of one's relations, of course if one's relations were decorative, there was every reason for hanging them on the wall. But suppose you had to make a stoical and Roman choice between relations and decorative art, he hoped decorative art would be given first place. It was sad to think how the piano, which should be the centre of culture in every house, was, as a rule, the ugliest thing there. It was possible to hide the ugly parts of the huge rosewood grand with embroidery, but that dulled the tone. Better far take a hint from the pretty little harpsichords and spinets of the last century, with their beautiful carved wood cases and decorative work. If a school of art would set itself to produce a piano and decorate it well, that would be really an era of art.

The whole basis of art lay entirely on the honour and value they gave to handicraft. He could not but think that, in the comparative neglect of handicraft, there had been a great mistake made as regarded popular education. A great deal was to be learned by watching a man doing something useful, as a smith working at his anvil or a carpenter in his shop; and if, instead of teaching little boys and girls the latitude and longitude of countries that nobody wanted to go to—which was called geography—and all that criminal calendar of Europe, which was termed history—if, instead of wearying children with these two so-called sciences, we were to teach them simple decorative arts, how much better we would make them, and what a source of knowledge and delight in afterlife we would be giving to them. Let them be sure, before they directly appealed to the mind or soul by printed books, that there was a mind to appeal to; and how could they better create a mind than by teaching a child to design? This meant, in the first place, opening the child's eyes to the wonders and beauty of the world around it, so that there would be nothing—the pageant of the clouds in the morning and in the evening, the flight of birds, the moon, the sea, the waving grass—which would not have its little message of beauty to the child. Then, when his eyes were suddenly opened to these beauties, show him how there was no mechanical instrument in the world which, for delicacy and exquisiteness and power, could match the human hand, by which he could transmit to others the sense of beauty and reverence which he had in things around them. So he should like to see in every school, for rich and poor alike, a pleasant workshop. He did not say banish books entirely; but he did say teach also carpentry, carving in wood, working with the potter's wheel, working in metal, and at *repousse* brasswork—the beating out of brass and silver being so simple—working in leather, and designing in various other materials. Let this be to the child an art, not merely a trade. Mr. William Morris said once, talking of his own workmen, "I have tried to make the artisan an artist, and when I say an artist I mean a man." What nobler definition of an artist could one get? He could not but feel that a great deal of our over-seriousness in decorative art came from people taking to art merely when they grew up, and not having been brought up to it from their childhood. Look at Japanese art. It seemed to be the art a lively child would paint if it meant to amuse others. Look at Gothic art and all the fun that went on around those beautifully carved Gothic pillars. He could not but think there was not enough of play in our art. If artistic education began at the earliest time how changed all this would be! How wrong they were to let children live in a sordid atmosphere. Their school should be the most beautiful place in every town or village—not whitewashed walls with everything around dull. It should be so beautiful that the greatest punishment for a little boy would be not allowing him to go to school next day. It was so in Japan, where the decoration of the school was changed every week. How little that was really beneficial did



children know. Perhaps they knew the population of Madagascar—how many blacks and whites were there—as if that made the slightest difference, or of what colour they chose to be. Perhaps they knew also the names of the kings in the Saxon Heptarchy, as if that could be a source of any delight in after life. But perhaps they would not know how anything useful around them was made. He did not think children would ever be cruel to animals if they were taught designing, because they would then learn to admire all the bright-eyed furred things that lived in woods and fields. Teach a child to love what is good and beautiful, and to hate what is ugly and evil. Every great artist, it seemed to him, had taken a certain degree of delight in working at simple things. Raphael designed furniture for the Vatican. Titian painted many a lovely chest in which a Venetian girl could keep her marriage dresses. The real ruin came to art when artists separated themselves from handicraft. This was the hour to weld again into one the artists' and handicrafts' art. The mission of art was very simple. It had no very elaborate philosophy about it. It merely claimed to bring into the life of every one of us a little joy, to touch the fleeting hours of day and make them gracious. If asked what great things art would teach us, he knew no better answer than the language of Keats, "I have not got the slightest reverence for anything in existence except for the Eternal Being, the memory of great men, and the principle of beauty."

### LABOURERS AND ARTISANS' DWELLINGS.

THE following is the concluding portion of an article by Mr. Chamberlain which appears in the *Fortnightly Review* for December:—

After defending the Birmingham Corporation from the criticisms of Lord Salisbury, and declaring that the cost of improvements is an insuperable obstacle at present to a bold and comprehensive dealing with the subject, by reason of "the exorbitant valuations of arbitrators and juries, and the extravagant expenses allowed in connection with them," Mr. Chamberlain proceeds:—

Here, then, we arrive at the conclusion of the whole matter. It is simply a question between the rights of property and the rights of the community, and as long as we are willing to treat as one of the incidents of private ownership the power of exacting extortionate terms of compensation whenever the necessities of the public call for expropriations, we may write as many articles and make as many speeches as we please about artisans' dwellings, but we shall not advance one single step in the direction of their improvement.

Is there reason to hope that public opinion has advanced to a proper appreciation of the situation? Is Parliament prepared to recognise the obligations as well as the privileges of ownership, and to insist that this traffic in misery and vice shall no longer be a source of profit and advantage to those who wink at its existence, or actually assist in promoting it?

It is to be feared that Lord Salisbury, at any rate, has not arrived at a clear conception of the duty of the State in this matter. He is in favour of everybody doing something except the persons who are the authors of the mischief. He appeals to private charity, and recommends the extension of the useful and benevolent work associated with the name of Miss Octavia Hill; he urges employers of labour to undertake the business of housing their work-people; he calls on the State to lead the way in this socialistic movement; and he contemplates a large extension of the system of public loans, which he would advance on insufficient security and at unremunerative rates to private bodies, like the Peabody trustees.

These proposals all have a fatal tendency—even if they are not dictated by the wish—to shift the burden from the right shoulders, and to load the public with a responsibility which properly belongs to the owners of the land.

They are, besides, ill-considered and ineffectual for their purpose. What can be more unpractical, for instance, than the demand that the State shall provide house room for all its servants? Consider the difficulties raised by such a scheme. Is the accommodation to be provided free, and in addition to present salaries and wages, or is it to be charged at a fair market rate? If the former, then the proposition amounts to a grant of one-sixth increased remuneration, over and above the ordinary rate of wages, to all persons at present in the employ of the Government, and at the expense of course of all persons who are not officials. A sum which must be counted in millions will be added at once to the taxation of the country; but this is by no means the only objection. The grant of house accommodation must be proportioned to the size of the family—otherwise the State would become *particeps criminis* in overcrowding—and the postman with a large family of eight or ten children will receive benefits double or treble the value of what will fall to his comrades who have remained single. Again, is the accommodation offered to bear any relation to the position of the official, or is a coal porter to have the same apartments as a confidential clerk or private secretary? If, however, the accommodation provided by the State is to be rented at a fair value to its servants, we are landed in another set of difficulties. Are all the officials to be required to avail themselves of the house

room offered them, and at the rents fixed by the Treasury? If so, there will be something like a general strike, and not half of the existing officials will surrender their independence and right to choose their own residence for their appointed share in the great Government barracks which Lord Salisbury would erect for them. If acceptance is voluntary, what is to be done with the rooms and houses which will be vacant and unoccupied by officials? Is the State to become general landlord and lodging-house keeper? *À la bonne heure!* but this is nationalisation of the land with a vengeance, and will lead us much further than Lord Salisbury appears to imagine.

Lastly, who is to insure that the evils of overcrowding and of insanitary conditions do not grow up even in the Government buildings? Are we to have a new department charged with the inspection of the private life of all the members of the Civil Service, a new *police des mœurs* created for the express benefit of Government officials?

Lord Salisbury's proposal as to loans of public money is as vague and unsatisfactory as his scheme for State almshouses. He throws over Sir Stafford Northcote, who, as Chancellor of the Exchequer in 1879, forced a Bill through the House of Commons which raised the rate of interest on all loans granted by the Public Works Commissioners. The present writer, with Mr. Shaw-Lefevre, and a few others, opposed this legislation. We warned Sir Stafford Northcote that by increasing the cost he was rendering impossible any future operations under the Artisans' Dwellings Act, the Harbours Acts, and other measures, an essential feature of which was the provision of capital on favourable terms under the guarantee of the State. The opposition was of no avail, and only earned for those who took part in it a charge of obstruction, which has been often repeated in subsequent years. It is some satisfaction to find that events have justified our criticisms, and that, in the dual leadership of the Conservative party, one voice is raised to condemn the policy which was initiated by the other.

But while admitting the principle of State loans for such purposes as that under discussion, we may be permitted to point out that nothing is to be hoped from the particular proposal of Lord Salisbury. To lend money at 3 per cent. to non-representative bodies, who are largely irresponsible in their actions, is a very doubtful policy. What security is to be taken for payment of the interest and for the ultimate reimbursement of the loan? It is not so much capital that is wanting in the case of the Peabody Trust and similar undertakings, as the opportunity of expending it with any chance of a reasonable return. The difficulty is to get sites for building at a cost which will allow of even 3 per cent. upon the outlay. Lord Salisbury's own article shows that in the most recent case this object has been attained by a sacrifice of property belonging to the ratepayers equal to half a million of money.

Passing over, then, these halting suggestions, let us go to the root of the matter and state the principle on which alone a radical reform is possible. The expense of making towns habitable for the toilers who dwell in them must be thrown on the land which their toil makes valuable, and without any effort on the part of its owners.

When these owners, not satisfied with the unearned increment which the general prosperity of the country has created, obtain exorbitant returns from their investment by permitting arrangements which make their property a public nuisance and a public danger, the State is entitled to step in and to deprive them of the rights which they have abused, paying only such compensation as will fairly represent the worth of their property fairly used.

1. The law should make it an offence, punishable by heavy fine, to own property in a state unfit for human habitation. The law already punishes the retail tradesman who exposes diseased meat for sale, and it is a much more serious offence to make a profit out of conditions which are absolutely incompatible with health and morality.

2. In every case in which the local authority acquires property under these conditions, the arbitrator should be empowered to deduct from the ascertained value such sum as he thinks fit by way of fine for the misuse of the property and the offence committed in allowing it to be the cause of disease and crime.

3. Local authorities should have power, subject only to appeal to the High Court, to close such property, or to make at the expense of the owner such alterations or repairs as may be ordered by the sanitary officer, without being compelled to acquire it.

4. Local authorities should be further empowered to acquire any lands and buildings for the purpose of a scheme under the Artisans' Dwellings Acts, at the fair market value of the same, to be settled by an arbitrator appointed for the purpose, and instructed to give in every case the value which a willing seller would obtain in the open market from a private purchaser, with no allowance for prospective value or compulsory sale.

5. The valuation should be made in every case by an official arbitrator, and no appeal should be allowed from his decision.

6. The scheme of improvement should include any surrounding property which will be benefited by the reconstruction of the unhealthy area, and the confirming order should authorise a rate to be levied on the owners of such adjacent property, fairly representing the appreciation of their holdings by the proposed improve-



ment. The principle of this proposal has always been adopted in the case of town improvements in the United States, and it has even found its way into English legislation. The Artisans' Dwellings Act, 1882, provides that when in the opinion of the arbitrator the demolition of the property dealt with adds to the value of other property belonging to the same owner, the amount of such increased value may be apportioned and levied as an improvement rate on lands, &c., affected; and a similar provision has been inserted in a Provisional Order, 1879, obtained by the Corporation of Liverpool. All that is now required is to extend this principle to all lands benefited, whether belonging to the same owner or not.

7. The cost of any scheme for the reconstruction of an unhealthy area should be levied on all owners of property, including long leaseholders, within a certain district to be determined by the scheme. The promoters would, in fact, in every case specify a contributory district, and the official sent to conduct an inquiry into the scheme would decide whether or not it had been rightly defined. The contributory district might be, in London, the whole metropolis, or, in the provinces, the whole borough; but if the improvement were essentially local in its character, and likely to be to the immediate advantage of a more limited district, the cost might be thrown entirely on the owners within such district.

The effect of these or similar provisions would be simply that improvements on a large scale, and in every large town, could be undertaken by the local authority without fear of excessive cost or additional burden on the rated occupiers. This is the age of municipal activity and enterprise, and there is not the slightest doubt that local authorities would under those conditions joyfully embrace the opportunity afforded to them, and that they would quickly put an end to the scandal and disgrace which has at last forced itself on public attention, and alarmed and shocked the public conscience.

It remains to be seen whether practical effect can at present be given to the only measures which afford hope of permanent relief, or whether we shall be condemned to witness yet another tinkering of the machinery which has entirely broken down.

In this case it will be our duty to point out to the people at large that what they want done they must secure for themselves. Political power is only the means to an end—the extension of the suffrage and redistribution of seats would, indeed, be as worthless as the vacation essays of great landowners if they did not lead directly to the practical solution of some of those social questions which intimately concern the welfare of the masses of the people, and in the settlement of which they have a just right to make their voices heard.

### THE NATIONAL PORTRAIT GALLERY.

SEVERAL pictures of long established popularity have been added to the National Portrait Gallery under the new Act of Parliament, which enables the trustees of the National Gallery to lend to other institutions. The large "high room" of the Portrait Gallery has been re-arranged, and was open to the public on Monday. The well-known full-length picture of John Philip Kemble as Hamlet holding the skull of Yorick, painted in 1801 by Sir Thomas Lawrence, has, after falling into an almost hopeless condition of obscurity from exposure to gas and heated air in the South Kensington Museum, been successfully cleaned by Messrs. Haines & Son, and occupies an important position on the side wall. The majestic full length of Mrs. Siddons reciting from "Paradise Lost," also by Lawrence, and given to the nation by her friend Mrs. Fitz Hugh, is another instance of satisfactory restoration. Theatrical portraits of Fawcett, "Gentleman" Smith, Morton the dramatist, and Miss Stephens, afterwards Countess of Essex, will be found in the same room. Several choice portraits by Gilbert Stuart, painter of the *Skating Man*, which excited so much interest at the Burlington House Exhibition in the winter of 1878, representing Mr. W. Grant of Congalton have also been transferred to this collection. They were never so well seen in Trafalgar Square. The portraits are Benjamin West, P.R.A., William Woollett, the engraver, and John Hall, who succeeded him as historical engraver to the king. John Smith, the mezzotint engraver, who chiefly devoted himself to the works of Sir Godfrey Kneller, by whom the portrait was painted, blends appropriately with this interesting group. It had been presented by Mr. William Smith to the National Gallery before a distinct collection devoted to portraiture was established. *Sir John Soane*, the architect, is a highly favourable specimen of Jackson's breadth of treatment and power of seizing character. *Sir David Brewster*, painted by Sir John Watson Gordon, with solid heavy colours, although fully conveying the look and character of the individual, is a singular contrast, on technical grounds, with the preceding. A portrait of *William Pitt*, one of the numerous repetitions by Hoppner to be found in great houses and public institutions, and by no means one of the best, represents the statesman in a white cravat and plain black suit, resting the fingers of his right hand on the embroidered robe of the Chancellor of the Exchequer laid on a chair beside him.

At the entrance of the gallery, forming one of a group of eminent English women, is an effective portrait of *Mrs. Mary*

*Somerville*, drawn by James Swinton, and bequeathed by her daughter, Miss Martha Charters Somerville. It is encumbered with an elaborately-ornamented wooden frame carved by herself. The marble bust of *Mrs. Jameson*, the gifted writer on art and matters connected with social improvement, by John Gibson, her friend and admirer, has been transferred to this collection from the South Kensington Museum, where it had been deposited before the establishment of the National Portrait Gallery in a place suited to receive it. The National Gallery has also transferred from Trafalgar Square a so-called portrait of *John Milton*, by Van der Plaas, with a pilgrim's staff and gourd beside him, and a small figure of the Redeemer issuing from the tomb in the upper right-hand corner. A curious water-colour drawing of *General Wolfe*, showing his pointed nose and receding forehead and chin in profile, turned to the left, is attributed to the pencil of the Duke of Devonshire. It formerly belonged successively to two Duchesses of Devonshire, Lady Georgiana Spencer, and Lady Elizabeth Foster. It has the appearance of having been drawn by an amateur from the life, and is presented by Lord Ronald Gower. A bust of *Porson*, electrotyped on a mould taken from his face by Ganganelli, has been bequeathed by his niece, the late Mrs. Chuter; and a terra-cotta bust of *David Garrick*, full of animation, comes from Sir Theodore Martin, who had previously given the attractive portraits of *Margaret Woffington*, *Flaxman*, and *Hayley*.

On the walls of the outer room, among the very earliest portraits, have been placed some outlines facsimiled from tracings taken from the original wall-paintings in St. Stephen's Chapel, Westminster, depicting King Edward III., the Black Prince, and other members of the royal family, by a skilful contemporaneous artist. These tracings have become the more valuable as the originals perished in the great fire which destroyed the Houses of Parliament in 1834. The facsimiles were made and presented by Mr. George Scharf, the director of the gallery. A large number of autograph letters and documents have recently been added. For these no money is appropriated in the annual grant by Government, and they are exclusively donations. Among them are many letters of considerable historical interest presented by Earl Stanhope from among his literary treasures at Chevening.

### THE FORTH BRIDGE.

ONE of the four caissons which will form the foundation of the large span on the South Queensferry side of the Forth, has just been completed by Messrs. Arrol Brothers, of Glasgow. All the caissons will be of similar construction, though slightly varying in height to suit the inequalities of the surface on which they will rest. Each of them will be 70 feet in diameter, varying from 46 to 64 feet in height, with an inclination of 1 in 46. The one which is just completed, and of which the others will be *fac-similes*, is built up in plates, and is constructed in the most substantial manner. It consists of two skins, an outer and an inner, and these, which are placed 7 feet apart, are made of iron varying from three-eighths to five-sixteenths of an inch in thickness. Seven feet from the bottom the inner skin is made to slope outwards at an angle of about 45 degrees, and, joining the outer skin at the point, forms what is known as the shoe, which is entirely composed of Hallside steel. The cutting edge of it is formed of two 6-inch angle-irons, three-quarters of an inch thick, placed back to back. To these the junction of the outer and inner shells is rivetted, the whole of this cutting edge being bound on the inside by a half-inch plate, and on the outside by an inch plate 18 inches deep. Between the outer and inner skins there are heavy diagonal angle-iron bracings, placed horizontally and vertically, and the whole plates are to be caulked so as to make them thoroughly watertight. Between the skins there are bulkheads, in order to divide the space into ten compartments, the object being to facilitate the sinking of the huge piece of metal. In the inside four main girders are carried across the floor of the caisson at equal distances from each other, and these are taken right through to the outer skin, so as to give more strength, and prevent any chance of collapse by the pressure of the water on the outer shell. Just at the point where the inner shell turns towards the angle to form the shoe, a floor or roof of  $\frac{3}{8}$ -inch iron plating is laid across, and is also made watertight. It is carried by means of four strong latticed girders, 18 feet deep, and to these are attached a sufficient number of cross-girders, to make the floor perfectly rigid. These main and cross-girders are so placed that the floor will resist an air pressure of 30 lbs. to the square inch. It is intended that while the operation of sinking the caisson is being performed the men will work in the seven-feet space underneath the floor, access to which will be had by three tubes reaching to above the level of the water, and all fitted with the necessary air-locking doors. It is estimated that there will be about 400 tons of iron in each caisson.

Messrs. John R. Clayton and Alfred Bell have received a warrant from the Lord Chamberlain appointing them "Glass Painters to the Queen."



## NOTES AND COMMENTS.

It is not surprising, when the state of the building trade in general is considered, that for the past seven years the North Wales slate trade has been depressed and unsatisfactory to the quarry owners. It was also inevitable that there should be a competition that was not conducted on sound principles. Some of the principal owners of quarries now see that there must be united action if the trade is to be again successful, and a meeting was lately held in London to consider the subject. The main question discussed was whether the prices in 1884 were to be raised or reduced. On one side it was urged that at present prices are too low, and that it would be politic to increase them. But the majority were of opinion that as the stocks at the wharves were increasing in quantity, any addition to price would be likely to promote the trade in foreign slates. It was finally decided to reduce the prices of large-sized slates, and in a few instances to slightly raise the prices of small slates. The reduction will not be made uniformly nor by means of a percentage, but each size has been discussed separately, and reductions made in accordance with the requirements of the trade.

THE committee who were entrusted with the examination of the designs for the National Museum and Library in Dublin have not taken much time to arrive at a decision. The members, with one exception, were Irishmen. Lord POWERSCOURT, Sir ROBERT KANE, and Mr. JOHN McCURDY were on the former committee, and the remaining members were Mr. DAWSON, Lord Mayor of Dublin; Sir WILLIAM GREGORY, formerly Governor of Ceylon, whose exertions for the preservation of Arab art are well known; Colonel NOLAN, R.A.; and Lieutenant-Colonel FESTING, of the Science and Art Department. In this trial the Irish architects have been fortunate. Out of the five designs selected, three have been prepared by architects who are resident in Dublin—viz. (1) Messrs. THOMAS N. DEANE & SON, (2) Mr. THOMAS DREW and Mr. W. M. MITCHELL, (3) Messrs. MILLER & SYMES. The remaining designs selected are by Mr. OWEN WILLIAMS, of Bangor, and Mr. FRANK HOLME, of Liverpool. But we give the names with some reserve, for their accuracy has been doubted, and as yet there has been no official announcement of the results of the first stage in the competition.

So many dangers are supposed to arise from living in ordinary dwelling-houses, we are not to be surprised if a sanitarian suddenly advocates that we should go back several stages in civilisation and dwell in tents. It was lately ascertained in Berlin, by Herr PETENKOFER, that the minute pores in bricks serve for ventilators, but a San Francisco naturalist has discovered that "each pore in a brick is inhabited by a peculiar rod-like animalcule of the genus *bacili*." The bacili are most interesting beings. "Their motions when they were agitated by blows were as the links of a chain, reminding one of a system of joints to be extended and contracted. They were semi-transparent, with a light, scintillating column nearly two-thirds their length, extending from near their head to their pointed tails, probably their spinal column." They are too, if we are to believe our Californian observer, identical with the animalculi that are observed to be connected with some of the most grievous forms of human suffering. The only way to escape from them it appears, is to build houses of stone or terra-cotta, and we may shortly expect to learn that the San Francisco philosopher has a financial interest in a quarry and a pottery which hitherto have not been successful.

It is proposed to publish reproductions of ninety-nine drawings by ALBERT DURER, from those which are in the Royal Print Room, Berlin, and in the collections of Mr. MALCOLM, of Poltalloch, Mr. WILLIAM MITCHELL, and Mr. FREDERICK LOCKER. They will be edited by Dr. F. LIPPMANN. DURER's style of drawing would seem to have been designed for such a purpose, and the publishers announce that they have been able to produce a collection of facsimiles which will afford enjoyment to the public, and instruction to students in art. Several processes have been employed, such as phototype, heliogravure, woodcuts, photo, and chromo-lithography, as well as combinations of those processes, so as to produce faithful facsimiles and efficient substitutes of the originals, the method selected being determined by the peculiar characteristics of each individual drawing. If the first series of reproductions be successful, a second series will follow without delay.

SOME of the gentlemen in the office of Mr. PEARSON, assisted by Mr. EVANS, the surveyor, and his staff, have subscribed the cost of the enrichment of the largest bay of the choir groining of Truro Cathedral—viz., that at the intersection of the choir and eastern transepts. It is desirable that an effort should be made to continue the enrichment throughout the choir; as if it is not done now that the scaffolding is up it will be impossible, or at any rate very difficult, to do it afterwards, not to mention the enormous difference in cost it would make. If done now the cost of the other bays would be about 160 each. There are six bays in the choir and two in the eastern transepts, making eight bays in all; that is, about 1300 are required to finish the whole complete. Mr. SWAN, the clerk of works, anticipates that there will be little difficulty in raising that sum.

WE have often recommended that local archæology should become a feature in provincial museums. Anything, in fact, would be preferable to the carved paddles by South Sea islanders and the Egyptian mummies which meet the tourist throughout England and Scotland. In Glasgow the Corporation have agreed to co-operate with the local Archæological Society in securing local antiquities. The members of the society will endeavour to collect objects, and the Corporation will undertake to provide cases and other requisites for their preservation. As soon as there is a sufficient collection, the Corporation will provide a room or rooms where it can be seen by the public. This willingness on the part of the Corporation is likely to attract donations.

ELECTRIC lighting has been adopted at the works of the Forth Bridge. The workshops at South Queensferry are lighted by 16 arc lights, supplemented by a certain number of movable small incandescent lights. Outside 12 large arc lights serve to illuminate the various lines of rails and the approaches to the workshops. The offices, canteen, and other buildings are lighted throughout with Swan incandescent lights of 20 candle power, over 200 being there alone required for the purpose. The staging, which, beginning near the Howe's Pier, extends for nearly half a mile into the Firth, has, with its approaches, 12 large lights devoted to its illumination. On the island of Inch Garvie in mid-channel, four large arc lights are in use outside, and small incandescent lights in the offices and workshops, in the old castle, and in the neighbouring buildings. At North Queensferry six large arc lights serve for the outside illumination, and a number of incandescent lights for that of the interior of the offices and workshops. The lighting has been carried out under the direction of Mr. JAMES N. SHOOLBRED.

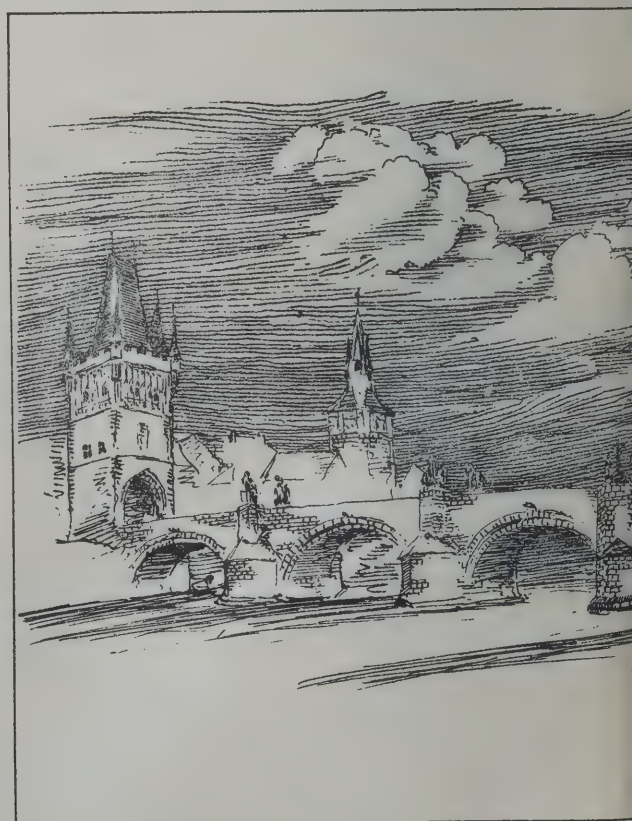
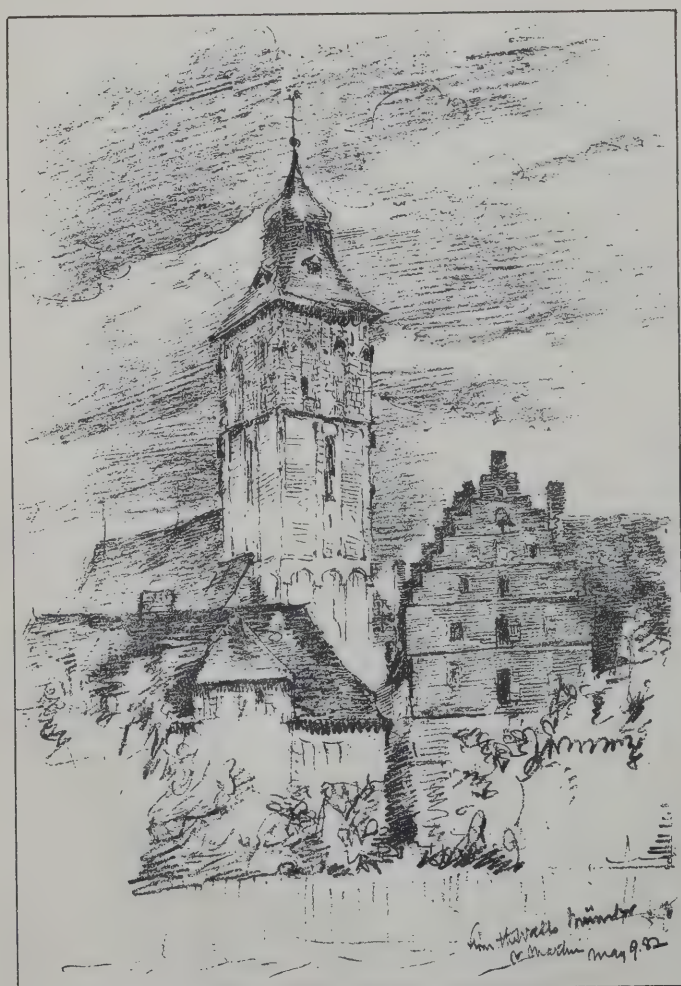
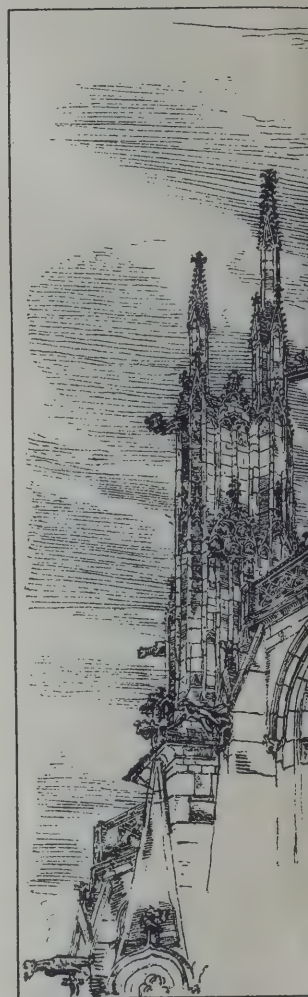
GLASGOW has reason to be grateful to the firm of Messrs. JOHN ELDER & CO. A week or two ago Mrs. ELDER contributed a sum that will be sufficient to endow a chair of Naval Architecture in the University. Mr. WILLIAM PEARCE, who now represents the firm, has undertaken to pay the cost of removing the old gateway of the former buildings of the University in High Street, and re-erecting it with a lodge near the new University. It has often been regretted that so little is left of the old University buildings, which were not only surrounded by historic associations, but were excellent examples of Scottish architecture. The buildings have had to succumb under railway works and city improvements, the gateway alone survived, and through Mr. PEARCE's munificence it will continue to be a memorial of a famous school.

A DECISION which was given in the Edinburgh Sheriff Court a few days ago is of importance to architects. In June a clerk of works was engaged by Messrs. ANDERSON & BROWNE to superintend the drainage works at Fettes College. In less than a fortnight he was dismissed, on the grounds that he did not keep a correct account of the workmen's time, and that his levels were incorrect. He claimed damages, and the Sheriff Substitute has upheld his claim. Mrs. ANDERSON had lost confidence in the clerk of works, but, according to the Sheriff, an employer is not justified in dismissing his servant unless a serious case of incompetence, neglect, or disobedience is established. But what is a "serious case," according to the Sheriff's notion, was not defined. Surely incorrect levels in drainage works are serious, and so are incorrect time-sheets. If an action had been taken against the architects on account of the defects in the drainage, or irregular expenses, would the Sheriff hold them to be exempt?



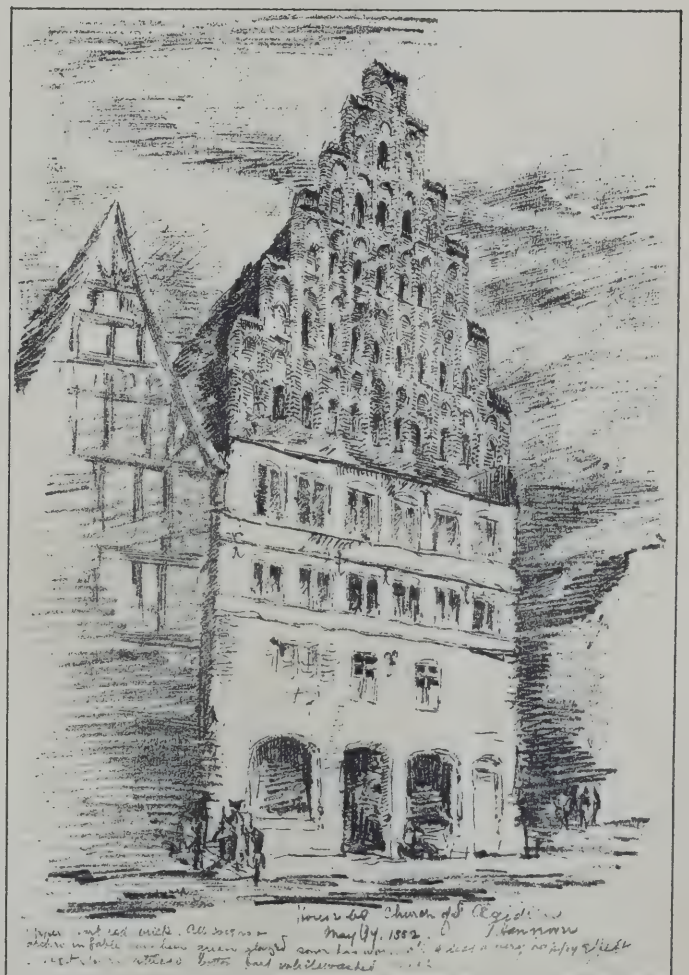
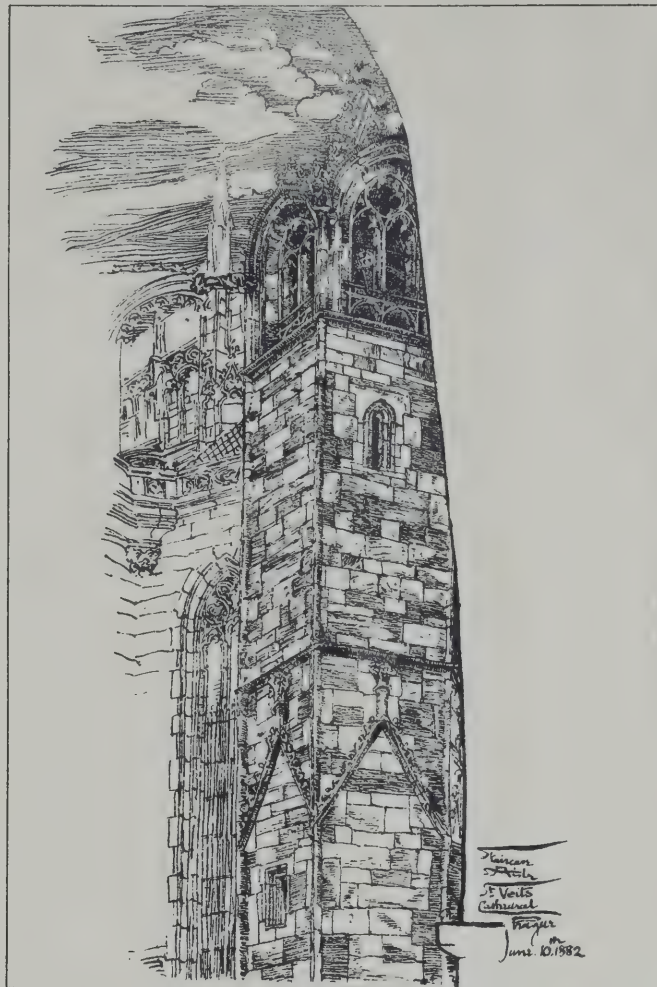








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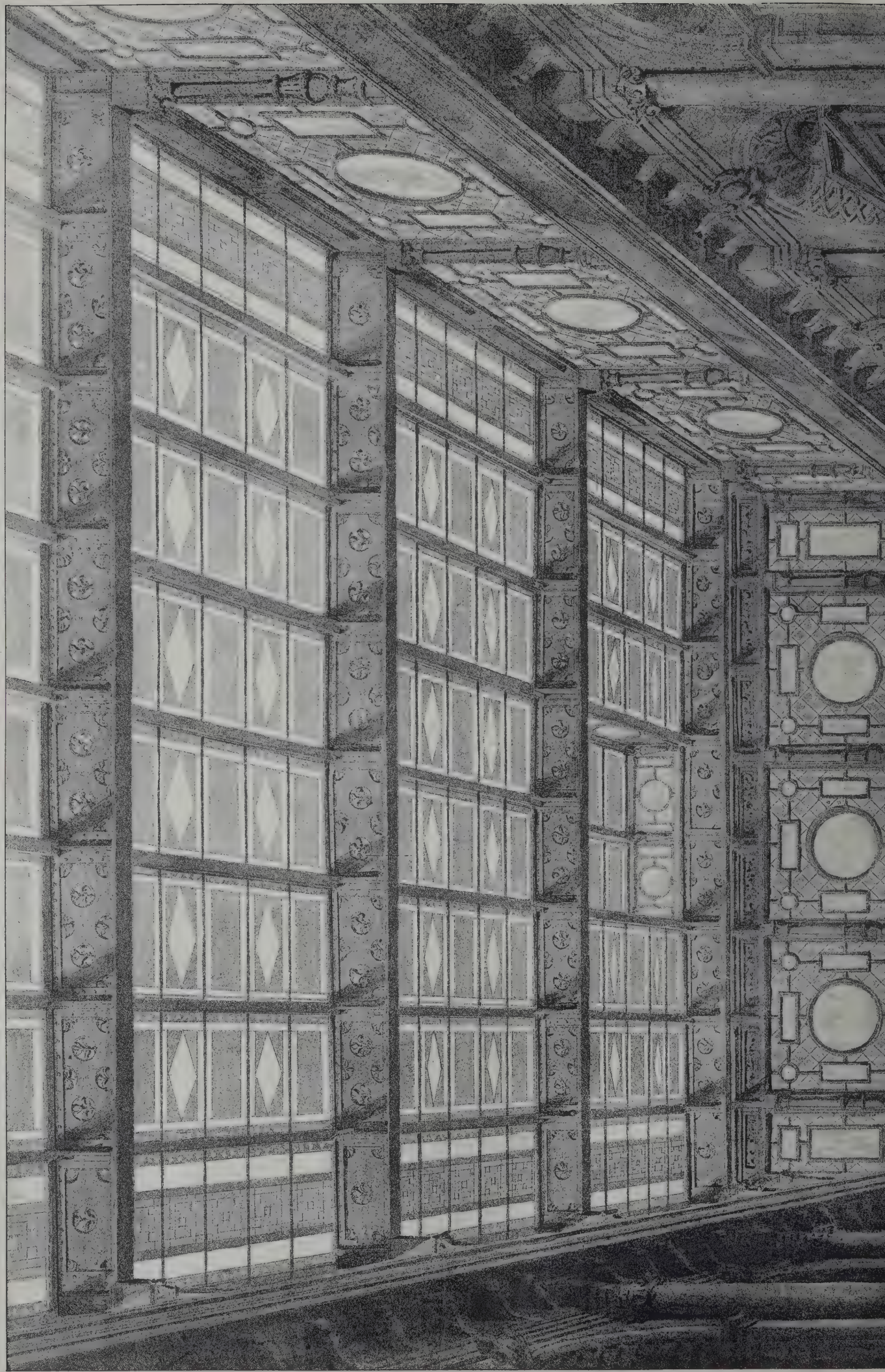




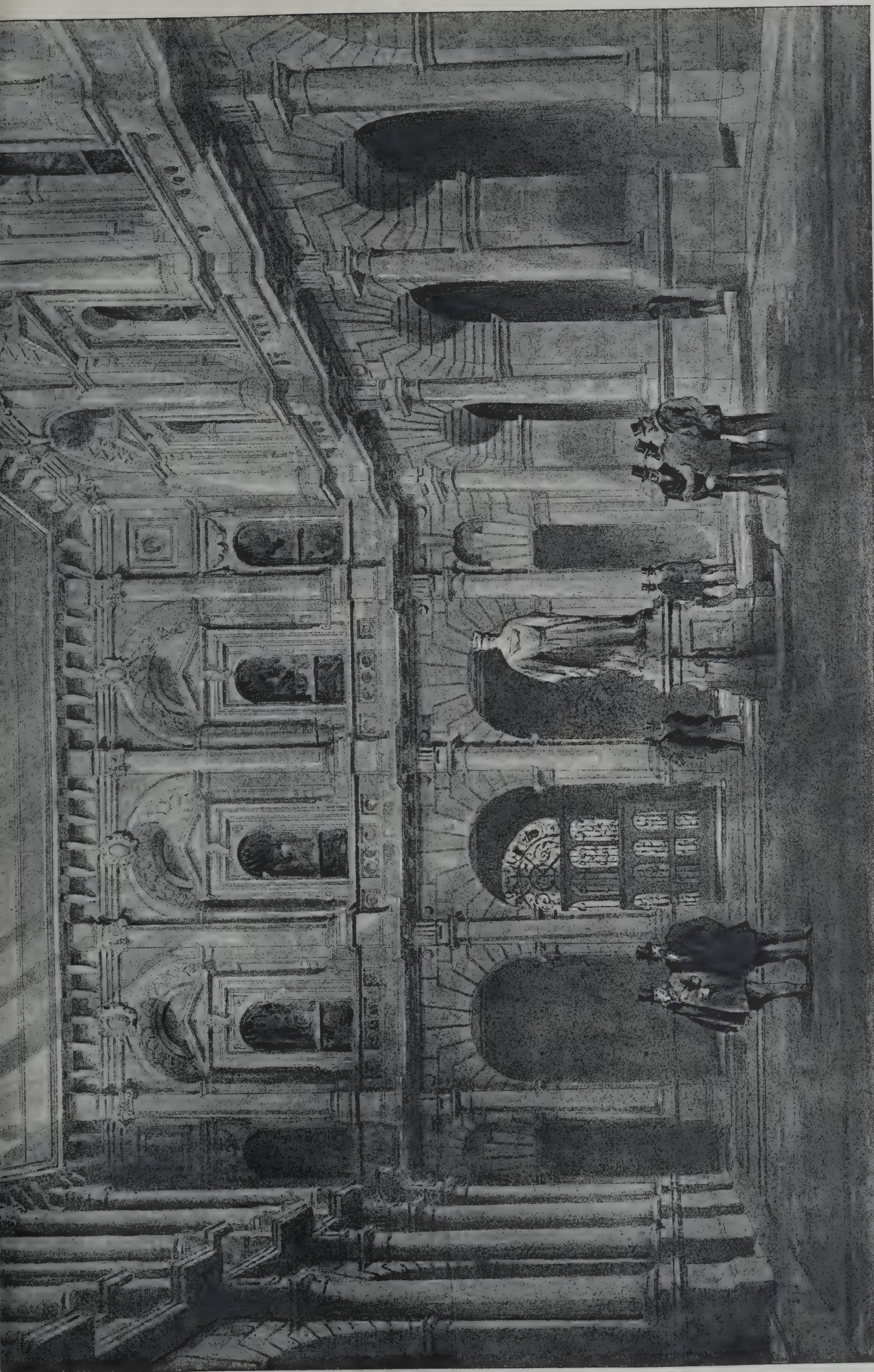












DESIGN FOR ROOF OVER QUADRANGLE, ROYAL EXCHANGE.

By GEO. AITCHISON, A.R.A.







## ILLUSTRATIONS.

DESIGN FOR ROOFING QUADRANGLE, ROYAL EXCHANGE, LONDON

OUR view this week is of the proposed roofing of the Royal Exchange by Mr. G. AITCHISON, A.R.A., one of the unsuccessful competitors, but as the designs were not publicly exhibited, no notion can be given of their relative merits. The paltry sum of 10,000*l.* was utterly inadequate for roofing the Exchange of the greatest mercantile city of the world, and is probably less than would have been expended by a second-rate town in Belgium or Switzerland.

Looking at the fact that the sum to be expended was only sufficient for the material covering of the quadrangle, the scheme appears to be sensible, practical, and not devoid of grace. The flat roof or platform, formed of HYATT'S lights, was relieved from monotony by having its borders and centres in slightly tinted glass; and it had these merits, that it would not be damaged by hail, could be readily cleared from snow, and could at all times be washed with a hose. There seems, too, to be ample means of ventilation both by the large circular sashes in the clear storey, and by raised lanterns in three places on the roof.

OFFICES OF "DUNDEE ADVERTISER," ETC., BANK STREET, DUNDEE. NEW BUILDINGS.

THERE are few, if any, newspaper offices to which the auctioneer's term "commodious" can be more aptly applied than to the extensive block of buildings from which the *Dundee Advertiser*, the *Evening Telegraph*, the *People's Friend*, and the *People's Journal* are issued. As a rule, printing-offices are not attractive to the eye, although some men say whenever they enter one their ambition is excited in some mysterious way. There must be, even in the humblest office, as much system as can be found in a man-of-war, but the outward signs of it are seldom apparent. The rooms are generally overcrowded, everything has a dingy workworn look, and too often the heat and absence of ventilation are inconvenient to a stranger. In Mr. LENG'S premises in Dundee the defects of ordinary printing-offices are absent; the rooms are lofty and well lighted, the walls are bright with colour, and the compositors and readers have room to move, instead of being packed like sheep in a pen. The remaining offices have been also arranged so as to afford as much comfort as possible to the employés. But the different departments of the establishment are so well planned by the architects that the large area of floor surface does not add to the difficulties of superintendence. In addition to the production of daily and weekly publications, miscellaneous printing is undertaken; but with all this variety of work there is no appearance of hurry or confusion. There is a place for everything, from the bales of paper in the vaults to the encyclopædias and blue-books in the reference library for the journalists. In one room a man can be seen employed on the cheapest kind of handbills, and in another an artist is at work preparing illustrations for an article which is being written in a third room, and which will in a few hours take the form of a stereotype plate. Here there are bookbinders, and elsewhere lithographers busily engaged.

A visit to Mr. LENG'S establishment at once suggests the causes of his success. His skill in organisation, his enterprise and sagacity, his liberality and consideration for his staff, have enabled him to produce newspapers and periodicals in a Scottish provincial town that can hold their own with those published in London. About twenty years ago the *Dundee Advertiser* was printed at a hand-press in a tumbledown house in Argyll Close, and if it now requires a palatial building and the most productive machinery that can be devised, the transformation is due to a wise management, which has not failed to recognise the ability and zeal of assistants. Great are machines and buildings, but without a staff that is loyal they will no more make a newspaper than class-rooms and apparatus can make a college.

The frontage of the offices of the *Dundee Advertiser* to Bank Street, as shown by the illustration, extends to 215 feet, and the block to the left forms the latest addition, having been completed in May last. This part has been designed to harmonise with the older parts, and at the same time to group with the adjoining buildings to form a symmetrical elevation to the north side of Bank Street. The frontage of this addition is 61 feet; the height from the street is 60 feet; and from the basement floor to the ridge of the roof is 77 feet. The masonry is polished ashlar, the stone being from the Leoch and Fallaws

Quarries. The foundations are of solid ashlar blocks in piers set on inverted arches, and built in cement. Care was needed in underpinning the gable at the west end of the old part of the office—which was founded at the street level—while the new work is 12 feet lower. The ground floor is used for publishing offices for the various papers; the wide doorway serves as a cart entrance for paper waggons, and a strong hydraulic lift is placed near it for raising or lowering the bales. The printing machinery is placed in the basement, and the newspapers are carried up by means of a continuous band with catches, which is kept in motion while the machinery is in action. The remaining floors are used for compositors' rooms, machines for commercial printing, bookbinders' rooms, stores, &c. The newspaper section of the establishment is in communication with the editor's room by means of electric bells, and manuscripts are conveyed to the printers by small patent lifts.

All the floors are carried on heavy rolled iron joists spanning from front to back without columns, their average span in the clear being 28 feet. There is no wooden joisting in the building, the flooring boards being 2½ inches thick, and resting directly on the rolled beams. The boarding is coated with fireproof asbestos paint, and by this construction—fire not being able to fasten upon the flat surface of the floor or ceiling in the way it does upon the usual system of joisting—a practically fireproof and, at the same time, a light floor has been obtained. The flooring is beaded on the joists for the sake of appearance in the ceilings of the rooms underneath. For extra security, and to insure that no accident in the floors above could affect the printing machines and engine in the basement, the floor at the street level has been entirely constructed of heavy rolled iron beams, with iron joists resting on and rivetted to them. These joists are embedded in concrete to prevent fire getting at them and softening them, and over the concrete the thick flooring is laid as on the other floors. The staircase is enclosed in fireproof partitions with iron standards and wire netting, instead of lath for the plastering. No wood has been used where incombustible material could serve the purpose as well, and all woodwork is coated with five coats of asbestos fireproof paint. The roof couples and purlins are of iron, and the sarking is covered with a layer of asbestos felt under the slates, to protect the room from extremes of heat and cold.

A hydraulic lift, capable of raising half a ton at a speed of 40 feet per minute, has been erected for raising the rolls of paper to the paper stores. The whole of the lift is cased from bottom to top with sheet iron to prevent it being the means of carrying fire from one flat to another. All doors in the building are lined on both sides with sheet iron, and having cast-iron frames fixed to the stonework. The doors are ornamented with iron mouldings screwed to the sheet iron.

The building is heated by small-bore malleable iron pipes, by Mr. CHARLES RITCHIE, of Edinburgh. Ventilation tubes about 6 feet high are placed in the corners of the rooms, and in each tube there is a coil of pipe which heats the cold air coming into the tube from the outside before it enters the room, thus preventing cold down draughts. Outlet ventilators with mica flaps are placed in the walls near the ceilings. All the walls are finished in cement for 4 feet in height, and the rest in plaster.

The following contractors were employed on the new buildings: Mason work, Councillor GENTLE; joiner work, Mr. J. W. LYON; slater work, Mr. MARTIN; plumber work, Mr. FARQUHARSON; plaster and concrete work, Mr. M'RITCHIE; iron roof and floors, Messrs. LEE, CROLL & Co.; fireproof doors, Mr. D. KEAY; iron beams, Messrs. MEASURES BROS., London, and McLELLAN, Glasgow; hydraulic lift, Messrs. WHYTE & COOPER; glaziers, Messrs. LINDSAY & SCOTT; wire work, Mr. DICKIE; painting, Mr. NORWELL; heating, Mr. CHAS. RITCHIE, Edinburgh; iron stairs, Lion Foundry Company, Kirkintilloch; stone-carving, Mr. NEILSON, Edinburgh; street gratings, Messrs. M'CULLOCH, Glasgow. Mr. DAVID GEMMEL acted as clerk of works. The whole of the works have been carried out from the designs and under the superintendence of Messrs. C. & L. OWER, architects, Dundee.

## CONTINENTAL SKETCHES.

THIS illustration is a reproduction of some pen-and-pencil sketches by Mr. A. BERESFORD PITE. As they relate mainly to Germany, the Dureresque style in which they have been drawn is allowable.



## THE ARCHITECTURAL ASSOCIATION.

THE second ordinary meeting of the Association was held on Friday evening, the 26th inst., Mr. Cole A. Adams, president, in the chair. After the election of a large number of new members, a lecture was delivered by Professor Kerr, which may be summarised as follows:—

## The Law Business of Architects.

Professor KERR began by observing that in choosing for his discourse that evening the subject of the law business of architects, he was quite aware he was dealing with a subject so large that it would be impossible to give more than something like a syllabus of what the treatment should be, or an index to the various questions that would be treated of in a book. But as those engaged in the practical work of architects knew their success to a great extent unquestionably depended on a knowledge of that administration of affairs which had to do with litigation, he could not too much impress on young men who were preparing for active work as architects to try and acquire this knowledge. This was a commercial country, and whatever honour might be paid to artistic merit, the people at large required the expert administration of affairs, and as building affairs were unfortunately much mixed up with litigation the young architect could not acquire this knowledge too early. Litigation might be defined in a few words as the process which the State provided for the settlement of the disputes of the people. Disputes to settle there always must be; and the perfection of litigation, if it could be conceived of, must be some system of adjudication perfectly simple, inexpensive, and satisfactory to the majority of litigants. That language he was sorry to say could not be applied to the English system of litigation. It was highly artificial, and it was complained of on all sides. The judges themselves would always advise us to avoid the courts of law; and, without any strong language, it might be said that litigation, as administered in England, was not satisfactory. Nor did they require a judge to tell them that when building affairs, with which they in that room had to do, were in question, litigation was most unsatisfactory. The substitute for litigation was arbitration. When an adjudication had to be arrived at, which would carry with it an authority equal to that of law, it must be by arbitration. It was the only way to arrive at justice where delicate and difficult technicalities were involved, which those who were not acquainted with the *arcana* of building affairs could not understand. It had always seemed to him that there was something in the training of the legal mind that prevented lawyers from condescending to those minutiae which building disputes involved. Some years ago an assessorship on expert business was established by statute for all courts of law, but the principle had not been carried into effect, or some such thing would be seen as an eminent assessor-surveyor assisting the judge on the bench.

The architect, when brought forward as an administrator of law business, had for his object justice and fair play. Not that this was not the purpose of law, but the law arrived at it in a different way. The architect was brought in to apply common sense and first principles. In building disputes the arbitrators commonly employed were surveyors, and not architects, and this, too, in matters more strictly concerned with architecture than surveying. The reason was that the business of surveyors consisted in controversy, where the architect dealt with office work. The surveyor by nature of his profession was always engaged in the settlement of doubts, and, in consequence, became better trained for the work; and so it was that when even architects were appointed as arbitrators, they were generally men known rather as surveyors than as architects. Out of the system of arbitration there arose the practice of "splitting the difference." This mode of deciding the dispute was the result, so to speak, of a natural law. When two parties to a controversy were brought face to face before an adjudicator, human nature prompted each to exaggerate his case, and, by what was so far a natural law, each party would probably exaggerate his case equally, justice according to the proverb lying midway between extremes. Hence arose the practice of "splitting the difference;" but sometimes the gentlemen employed as arbitrators were found systematically to split the difference, if not so as to please both parties, at any rate so as to displease each party equally—a practice which could not be justified. An architect should apply his whole mind to the merits of the dispute so as to arrive at the justice of the case, and then give his decision fearlessly and faithfully. An architect, as they all knew, was supposed to be a sort of arbitrator between client and builder; but that was not the principle of law, which considered the architect as the agent of the person who paid him. An architect was not entitled to demand so much confidence from the builder as from the client, yet the profession was so honourably practised that the architect was, in fact if not in law, an arbitrator between the two; and no one would wish this to be disturbed. But, as it was not a legal position, another idea had of late been brought forward and put in practice, by the introduction of an arbitration clause in the contract, providing for the appointment of an impartial person as arbitrator. The fair play of the principle was perfectly manifest; the only difficulty was the appointment

of the arbitrator. In the choice of an arbitrator it was not enough to select a man who was honest; what was wanted was a man acquainted with the business in hand, and possessed of specialist skill and a judicial mind.

An architect when brought into litigation or arbitration acted in one of three capacities, either as adviser, advocate, or arbitrator. In the capacity of an adviser an architect, to assume the position of an expert in building matters, must possess special knowledge. It was not enough for a man to say, "I am an architect, and therefore a safe adviser on all architectural matters." Certain architects were exceedingly bad advisers. They did not know the particular subject which they, nevertheless, took in hand. They forgot the responsibility they incurred in undertaking to advise in what they did not understand, and they incurred the danger of being defeated by a man who did understand it, and doing great injury to the client's interest. Therefore, in order to entitle any one of them to assume the position of adviser in building matters, it was necessary that he should conscientiously feel that he understood the matter, whether it were a question of party walls, dilapidations, ancient lights, or whatever else it might be; unless he conscientiously felt that he understood what was necessary to be done, it was not fair to undertake to advise a client. In respect of advocacy, partisanship was a trap that architects—especially young architects—were apt to fall into. When a barrister was employed in a case it made no matter to him on which side he was retained. His function was to take care that everything that could be said on his client's side should be said, and when he had said all that could be said he had done his duty, and the judge and jury must do the rest. Such a position would be mistaken ground for an architect to take up, and it often led architects to unpleasantness and cause for regret. To assume the position of advocate an architect must not only be conscientious, but he must be more than sure that he understands the business—he must understand how to secure justice in spite of opposition, whether it be technical or mere quibbling. Now, a practice prevailed in the profession against which he entered his protest—the delivering of one-sided reports. A gentleman, for instance, finds himself involved in a dispute with a builder, or a district surveyor, or whoever it may be, and he is recommended to go to Brown the surveyor. Brown says he will make a survey and deliver a report, and he does so. Now, he only hears one side of the question; he does not want to hear the other side. His business is to make an *ex parte* survey without possessing himself of a knowledge of the facts on the other side. But Brown goes further still. He says, "I have delivered my report, and I mean to stand by it," and he does. Whatever may turn up he adheres to the report through thick and thin in the witness-box. Let him deliver his judgment in writing by all means, but let him inquire into the facts before delivering his report. Affidavits, again, were often called for. An affidavit was a statement of facts within one's knowledge, and a statement of opinion on those facts, given in writing, and sworn to, to be handed into a court of law as evidence. He need not say how solemn a matter it was, and that the person making oath in this way should have absolute certainty of the correctness of his statement. Without casting any reflection on the profession, he was perfectly open to acknowledge that they sometimes were in the wrong. Lawyers said of architects, "We can go into the streets of London and get half a dozen architects, each of whom will make an affidavit to any statement we like; and you can do the same. Our men will swear white is black, and yours will swear black is white, and that is the value of expert evidence." He was sorry to say that judges said nearly the same thing; not in such forcible language, but in language even more vexing. It was a pity, for it could all be prevented and the evil cured if an architect, when called on to make an affidavit, would remember that no man had a right to make it unless he were wholly and conscientiously sure he understood everything, and that every word was absolutely and completely true.

Mr. Kerr said he proposed now to take cases of dispute and classify them in reference to architectural, or more properly building matters, in which they might be called on to act in one of the three capacities of adviser, advocate, or adjudicator. To take the valuation of property first. It was perfectly plain this was a surveyor's question, and not an architect's, and therefore when they were called in as advisers on valuation of property they must remember that, however expert they might be, it was an auctioneer's business, who alone knew at any particular moment what was the value of property. Many might, however, have noticed that an architect, when he understood the matter, was invariably deferred to. The valuation of property, however, was a specialist business, which there was no need to go particularly into. If a client, came to them and insisted on having their opinion, the proper course was to possess themselves of the principles on which property is valued, and then, in giving their opinion, to confess that their knowledge was only so and so, and explain on what grounds they based their valuation. If they went further, and came to be advocates, they could not dispense with being well up in these matters. Special skill was indispensable, and cross-examination was so ably conducted that it was hopeless that any one of them would be able to go into the witness-box if not possessed of this



specialist knowledge. A surveyor told him once: "I remember being called on to give evidence for that house. I gave my report in my client's interest, and I was prepared to do my best for him; but I happened to look into my papers, and I found that some years ago I had been engaged the other way for the house next door. So I went to my client and told him, and of course he did not put me into the witness-box." As an arbitrator in this kind of business, a man must be chosen who has a thorough knowledge of the subject; a man who is a really good, sound, scientific authority, or he will be of no use. Next came dilapidations and fixtures. These disputes though taken up by auctioneers were really an architect's work, the work of a practical architect thoroughly acquainted with building subjects. The law of dilapidations was that a tenant occupying a house as leaseholder entered into an obligation to keep the house in repair, and leave it at the end of his term in a substantial condition. The law of fixtures, on the other hand, was that anything the tenant added to the house, which could not be removed without damage to the house, must be considered to belong to the owner of the house, and must be handed over with the house itself, and that all the tenant added must be kept in repair. It seemed clear that no one but an architect, who understood the designing and the building of the house to completion, could properly understand the dilapidations on a building. It was astonishing to architects to see how lawyers reduced everything here to a mere jingle of words. As a rule, judge, counsel, and solicitors spoke of matters of this kind in a way which could be only described as dealing with phrases and not things. Such a dictum as this had been used to any extent, viz., that what was fixed to the wall with a screw belonged to the tenant, and if fixed with a nail it belonged to the landlord. It was merely a play upon the word "fix." Trivialities of this kind seemed to be binding in the case of the law of fixtures, and it might be taken for granted that the law of dilapidations was just as bad. When called on to advise, if they could obtain for their client mere justice, their course was clear, but if litigation had to be gone into they must read up the law, and possess themselves of the necessary knowledge before they could undertake to advise. Landlords, it might be admitted, were grasping. If engaged on the landlord's side, he would only remind them that honesty was the best policy. If they were advising the tenant, they might be sure he was more likely to go to the wall than to come out victorious; so if the tenant were about to go to law, they must make themselves thoroughly acquainted with the law, and try their best to do their client justice. For an arbitrator they must choose a man of experience and of elastic mind—one who would, if necessary, revert to first principles, and so get over technicalities. The law of ancient lights was this, that if your window had been in existence for more than twenty years, and had possessed light over a certain area of sky, that area of sky, as a lighting power over your neighbour's property, belonged to you for ever. A person who encroached on this sky area was entitled to encroach so long as the damage to your light was not material. The whole point turned on whether the damage was material or not. If the damage were material, the question would be asked in court whether the building should be taken down to where immateriality ceased, or compensation be paid. Now, what was an architect to do? Any architect who took on himself to advise a client, whether plaintiff or defendant, ought to know well what he was about, and must be able to judge of the materiality of the obscuration of light. If the architect were incompetent to do this, he had better leave the case alone altogether. If called on to act as advocate, all that he had just said was still more necessary. If, not being thoroughly competent, he were placed in the witness-box, and cross-examined by a barrister who understood his business, the state in which he would leave the box might be imagined. And, then, what damage he has done his client! They should never go into the witness-box unless they knew thoroughly what they were going to say, and the influence their words would have, and unless they knew the questions that would be put to them and the answers they would have to make. In an arbitrator the important thing required was a principle of elastic equity, that elasticity which arose out of acquaintance with things instead of words.

The Building Act Regulations were a set of rules whose object was twofold; in the first place to compel builders of houses to attain a certain minimum of substantiality—it was a miserable substantiality, after all—which should prevent a building falling about people's ears; and, secondly, to prevent the spread of fire. It was not difficult to acquire a sufficient knowledge of the Building Act Regulations to be able to advise a client to a certain extent; but unless they were district surveyors, they must exercise a certain amount of modesty, and what they did not know themselves they could always get from some one else. District surveyors he had always found willing to afford help in this respect. As an advocate in a dispute, the architect had to go to the police-court and do his best to persuade the magistrate that the district surveyor was in the wrong, one function of the magistrate being to see that the district surveyor was not straining the law. Police-courts were exceedingly unsatisfactory in building matters. They did not like building disputes, nor did they wish to have anything to do with them, and yet it was not easy

to see where else they could be taken. Still, if they treated the court with respect, the court would do them justice to the best of its power. If they went to arbitration, they would not think of appointing a man as arbitrator unless he were a district surveyor. As a body, the district surveyors always tried to prevent disputes. They had an organisation for the settlement of them, and were always found ready to set matters right. Another way of conducting an appeal was to go to the officers of the Metropolitan Board of Works, who would always decide fairly.

The next question he came to was that of party walls. The object of the Building Act was to keep lawyers out of disputes. The ownership of a party wall was a partnership affair between two unwilling members, and as it was a fact that could not be got over that the wall belonged to both, it followed as a principle that each possessed an undivided moiety of the whole. The ownership extended over the whole wall in an undivided way, so that each man owned the whole of any single brick, and an owner dare not touch a brick on his side of the wall without giving his neighbour three months' notice. Three months' notice was given in order that you might let your neighbour have time to turn round. In giving notice, it must be specified what was going to be done to the wall, and the best way was to take the list of everything that could be done, and say, "I intend to do all this." Then the neighbour must be told that this is a matter of form, and that it has been done because things might arise which were not foreseen at the first. After referring to the subsequent proceedings, as laid down in the Building Act, Professor Kerr remarked that it was an exceedingly common sense way of doing what might otherwise involve two unwilling partners in an interminable law suit.

In London the Metropolitan Board had charge of the law in respect of dangerous structures. It was quite enough if the Board received an anonymous letter from a passer-by saying that a house, No. So-and-so, in such a street, was in a dangerous condition. Notice was then entered in the books to that effect, and the responsibility rested with the Board. The Board sent orders to the district surveyor, and the responsibility then rested on the surveyor. His object was to get rid of the responsibility as soon as possible; he therefore made a report, and, if he erred on the safe side, how could he be blamed? He made his report so as to insure that the building should be made quite safe; and it must be agreed, hearing what they had heard of late, that it was right that good building should be enforced in London, *coûte que coûte*. The surveyor stated in his report what had to be taken down of the structure, and notice to take down was given to the owner. If the owner refused to take down he was summoned before the magistrate, who then decided what was to be done. Mr. Kerr said he recommended them not to encounter the district surveyor too rashly with opposition, because the surveyor had shifted the responsibility on the owner, and if they advised the owner to resist, the responsibility was shifted on to the adviser, and if the house fell down he might have to go to the Old Bailey. In regard of advocacy, a certain hardship existed. Dangerous houses were often, or very generally, houses existing at the fag-end of a long lease, and the leaseholder held the position of owner as regarded the liability for the state of the structure. The lease had perhaps a couple of years to run, and the leaseholder had to pull down a wall and rebuild it, or whatever it might be that had to be done. It was hard on tenants in general to have to do the repairs under such circumstances, for, do what we would, the expense could not be thrown on those who ought to bear it, and the district surveyor had, metaphorically speaking, to listen to the most heartrending appeals. It was quite right to represent all this to the magistrate, but the magistrate would say, "I cannot take the responsibility on my shoulders; if the Metropolitan Board won't, and the district surveyor won't," &c.

After the consideration of questions of structural disputes the next point dealt with was the performance of contracts, and the arbitration clause. It was intended by this that the builder should have an appeal to an independent architect. Contractors were often placed in a position of great hardship. An unfortunate phrase, "the best quality," was introduced into specifications which had no meaning at all, but which could be made to mean anything one liked. If the lowest possible tender were taken, how could the builder be blamed if he did all he could to avoid losing by the contract? There was scarcely a builder, he heard, but was losing by contract business. There was also such a thing as an exacting architect, who made very fine drawings and details, and often made the details while the building was going on. It was only in the usual course of things that the architect should like to improve his work, and it was only too likely that the improvement added a little more to the expense. Architects should be more generous with builders; and when it was said that builders were losing by building contracts rather than making money, architects should be more than ever disposed to look at both sides of the contract. The contract was a contract, but in the eye of the architect the specification had no hard-and-fast meaning. He remembered a report which he had once given, which was to this effect: "The work is very badly done, but it is done well enough for the money." As arbitrator it was not enough to appoint a nice man, but a man whose name and repute would justify one in



thinking he would administrate with elasticity. On the question of extras, Mr. Kerr observed that they would find they could make their bread much more easily by making out a bill of quantities than by making a pretty drawing.

The next point was *quasi* legal rather than strictly legal, viz., adjudication on designs. The adjudicator in a competition of architects ought to remember that he was assuming a position in which he took upon himself a responsibility which he ought to consider in accordance with the strict principles of equity as laid down by law. There was no contract between the competitors and the promoters of the competition, and that was the unfair part of competitions, so that one could not sue the promoters for the multitude of iniquities they committed. The professional adjudicator ought, in the first place, to insist on perfectly equitable conditions in the conduct of the competition, or else refuse to have anything to do with it.

In the matter of architect's charges, when an architect's bill was laid before them for an expression of their opinion, they should be cautious before they pronounced any opinion on it whatever. They should not go behind the back of the architect, but they should go to him and get his story. The etiquette of fraternity was not practised among architects. They did not hang together as the members in other professions did. They should always remember this as a principle—that whenever they had anything to do with the charges of a brother architect, they must make it a rule to go to him and hear his story. Then as to the architect's duties, Mr. Kerr remarked that he had often said that no architect's employer, if he were so minded, need pay him a single shilling, and this on the plea of negligence. In all questions of this kind, whether as to charges or as to conduct, ten to one the architect was in the right. Lawyers wanted to get a verdict, but if an architect acted as an advocate against an architect he was doing what was called "cannibalism."

Professional etiquette would be the last subject. Architects in practical business were associated with men of every class and description, with men in different departments of business, with professional men—some of high, some of low standing—with men who were great artists, men possessed of high sentimental feelings and the very reverse, with tradesmen, working people, &c. According to the individuality of a man's mind, so was there a tendency to imitate the manners and customs of those with whom he associated. They should be careful to imitate the manners of the best classes, but above all do not let them imitate the manners and the customs of the worst. There was this great distinction between trades and professions. In trade there was competition for business, which allowed one tradesman to canvass against another, but in a profession of any standing the idea of one man canvassing against another was utterly out of the question. There were certain trades in which it was competent for one tradesman to vilify another in order to succeed in business. In professions that was not allowed, and amongst architects it ought not to be. No one, though he had at times said many severe things, had ever heard him say anything to the disparagement of a brother architect. He had seen a good deal of the estimation in which architects were held in England. He would put it to them in this way: Whenever any of them were called to be the architects of a gentleman's house they would find they were made more of than almost any other professional men, and they would be set down to dinner, for instance, where they would not meet the doctor or the lawyer. He wished to impress on them that they belonged to a profession which was learned and which was illustrious. The amount of learning they had to accumulate was great. We heard of learned divines, of men learned in the law, but what complex matters architects had to learn did not seem to be known. Old Vitruvius, 1,900 years ago, said plainly that in his day the architect ought to possess universal knowledge, and it was pretty much the same in the present day. They, as architects, were a learned profession; they were treated as men who belonged to a profession of high degree. They belonged to a profession which was especially honoured in England; a profession of illustrious, historical repute. When it came to a dispute were they then to act as tradesmen? As rivals treating each other with mutual scorn? Was that the way to act up to the traditions of the profession they belonged to? Coming in contact with such high surroundings their conduct ought to be signally magnanimous. He could tell them, too, that self-sacrifice would be found to pay and shabbiness would not. One final remark he would make, and it was that they should never on any consideration take up a case in an unfriendly spirit against a brother architect.

Mr. H. TRUBSHAW proposed a vote of thanks to Professor Kerr for his address. It was very desirable, he thought, that young men should be encouraged to stand up for the honour of their profession. He always considered the line in specifications that "all materials were to be the 'best' of their kind" an unfair one where builders were invited to tender for the work, and so to undersell one another. As to party-walls, he should be glad to know if Professor Kerr could say if a decision had been given (he fancied in a provincial case) to the effect that where one of two adjoining houses was considerably higher than the other, the wall actually separating the houses was a party-wall above the roof of the lower

house, or whether it was simply the external of the higher house. He believed such a decision had been given, and should like to know if it was founded on a special or the general law relating to party-walls.

Mr. APPLETON seconded the vote of thanks. He judged that Professor Kerr's remarks, like the celebrated advice in *Punch* to those about to marry, was in most cases simply "Don't." It would be desirable if we could have specialists in some difficult cases arising out of building matters to whom we could submit the problems.

Mr. SEAGARS referred to New Zealand practice, where it was customary to keep all the builders in ignorance of the amount of the tender until one had been accepted. He did not think this fair, and proposed in practising in London to send all tenders he received for works executed from his plans to the professional newspapers.

The vote of thanks was put by the President, and carried by acclamation.

Professor KERR, after acknowledging the compliment, said, in response to a question that had been put, there was not work, as far as he was aware, in which all legal questions relating to building matters could be studied, at least no one book of recent date. There were many specialist books on most of the subjects he had referred to, which could be found in the Institute or Association libraries. The question as to what was the character of the upper part of a party wall where one house overtopped the other occasioned a curious decision given some years ago in a case from Bristol, and which had never been upset. The magistrate, in his wisdom, decided in a case of this kind that the wall below the roofs was of a party character, but above the lower building it became simply an external one. The effect of this decision was that in the numerous cases where adjoining houses differed in height the owner of the loftier one could pierce his blank wall with as many windows as he chose, and where, then, was the protection against the spread of fire? The decision was supported on appeal. As to the naming of an arbitrator in a clause of the building contract, his advice would be not to select an arbitrator until the nature of the case likely to be brought forward was known. He thought the New Zealand practice of keeping builders in ignorance of each other's tenders was unjust. In England, as most gentlemen knew, the tenders were usually opened in the presence of representatives of the builders who had tendered, and these representatives made a note of the prices, and sometimes sent them to the newspapers, although some architects disapproved of the practice.

#### MR. HERKOMER'S ART SCHOOL.

ON Saturday last Mr. Herkomer's school at Bushey was opened, and after a short address, a programme of the work to be undertaken every week was given. On Mondays, at 9.30 A.M., the model will be posed by one of the students (they will be taken in alphabetical rotation) in the presence of all the other students of the class, and the pose will have to be altered until a show of hands declares the satisfaction of the students. By three in the afternoon each student must have laid in the whole figure in colour, or those who have not yet painted must have drawn it in. This it is expected will prevent niggling, effeminate work. On Tuesdays the first hour and a half is to be devoted to sketching in chalk the same figure in the same view on a smaller scale. At eleven, having revived the power of the hand to that of the day before, the painting commenced the day before will be proceeded with. The whole of Wednesdays and Thursdays, till ten o'clock, will be occupied in the same way, but on Thursday afternoons the whole of the studies will be laid aside, the model re-posed with drapery by the same student, who is the poser for the week, four times successively, and sketches of a quarter of an hour's duration made therefrom. Friday will see the studies commenced on Monday finished, and a fresh model will sit the following week, except in cases where the president wishes one or more students to paint life size studies, when the model will stay a fortnight. On Saturday all the students, male and female, will work together, the study being a head painted in a sitting of three hours from the pose of the male student officiating that week. Within each week, therefore, there is the possibility of each student finishing a study, sketching in black and white from a draped figure, and painting a head quickly. Rapid realisation must in this way be acquired. From seven to nine each evening students will attend, but painting is strictly forbidden. From Monday to Thursday a drawing is to be made from one pose, and on Friday evening three fresh poses are to be sketched. The same poser who officiates in the morning does duty of an evening, so that each student in turn will be considerably taxed in this direction. Mr. Herkomer then gave an outline of his own intentions, saying that all his criticisms would be made before all, that he should not come to the school at any fixed time, but would attend as often as his engagements permitted or the welfare of the students demanded; that as the school was not the main object of his life, but merely an additional interest, he should go away sometimes; but that if he went landscape painting, he should be only too glad to tell them all about it.



on his return. He then urged upon all the duty of making the most of their faculties and gifts, not for themselves alone, but for others; advised them all to make no excuses to themselves for what they could not do, but to appeal to their own inner tribunals and see what was wanting, and when they had found their difficulty they could come to their president and he would do his utmost to help them. The faculty for prolonged concentration to finish a work was above all necessary in art, with portrait painting especially so, and therefore he wanted them all to make themselves work and not to wait for the mood and dawdle lazily along. The method of work he would not restrict, they might be eccentric at first if they liked, but they must produce artistic work. All the students had been asked beforehand to write down their chief difficulties in art, or two questions upon those difficulties. One of them Mr. Herkomer selected and answered, saying he would answer them all from time to time, and it was with great interest that the students followed him in his explanation of what should be uppermost in the mind in painting from nature, the technique or handling or the drawing, concluding by saying that nothing should be uppermost but the desire to represent what is actually seen. With a few final words, impressing the necessity for industry and zeal upon all, Mr. Herkomer finished his address, and the students and friends moved off to inspect the other studios, and to witness the ceremony of laying the corner-stones of the entrance cloisters. Thirty-four students have now gone into residence in the neighbourhood, nineteen ladies and fifteen gentlemen. The majority of them have been Slade School students, four come from Birmingham, and two from America.

### THE USES OF SCULPTURE.

AT the Birmingham and Midland Institute, on Monday, Professor Gosse lectured on "The Public and Private Uses of Sculpture." The lecturer said the subject of his discourse was one which, he ventured to believe, would within the next ten years occupy a great deal more of public attention than it had hitherto done. In the one art of sculpture France was so far ahead of any other country that it was hardly worth while to consider any other in our day. The sculpture of France was as healthy as the painting was morbid. Sculpture had been fostered in some degree in France by the Roman Catholic religion, and was now encouraged by the Democratic feeling, in the best sense of the term, which pervaded to so great an extent the middle classes of France, and which, teaching a man the real relation that he, as a citizen, bore to the State in material things, made him take a pride in the beauty of its streets and public buildings. By a stroke of intelligent Liberalism, then, we in England must realise that we were part and parcel of the grace and dignity of the cities we inhabited. The present system of public patronage was, he believed, altogether unwholesome to English art, and distressing to the sculptors—he meant the system of public competitions. Whenever the profession found an occasion to speak, it bewailed its fate on this question, and many sculptors talked of forming a sort of trades union to put the system down altogether. He was not opposed to it in theory, but he agreed with its fiercest opponents in what they said about it in practice. In the first place, the constitution of the juries was so careless and irrational that no artist of position liked to submit his work to judges so thoroughly unprofessional. But the strongest objection which sculptors had to the system was that it involved a great waste of time and money. The lecturer described what he regarded as an ideal jury with an ideal procedure, urging that the judgment of professional men should be taken. As to the patronage of local men, it was very hard in a provincial town to say that civic commissions should not be given to the artists that were born and bred and that lived there. But was not a local artist an artist who had never enjoyed the training of the great schools, who had remained local simply because his genius was insufficient to call him up to the metropolis? Why should a competition be needed at all? The names of the eminent sculptors were well known, as the names of the eminent painters were; yet if a competition were proposed to artists they would laugh in our faces. Considering what forms works of sculpture should take, Professor Gosse observed that in these days it took but one form, and that the worst possible. The persons to whom statues were erected in England belonged at present to a very limited class. They were mainly politicians and philanthropists, and politicians and philanthropists were rarely what he might call picturesque persons. He believed this was at the bottom of the lack of interest taken in sculpture in England. If we could once get over the notion of representing cloth coats and trousers he believed we should start on an entirely new basis. A man of intellect worked with his head. His arms and trunk, and least of all his legs, had no meaning or importance. The true work of the sculptor was to memorialise—in colossal form, if they pleased—those sublime heads from which intelligence, benevolence, and greatness of soul shone forth like a light. It had sometimes struck him, too, that the memory of actions rather than of faces ought to be perpetuated; nor did he see why monuments should be reserved for eminent persons, for his belief was that sculpture in

England had been bound up far too largely in two conventional classes—the portrait statue and the classic subject. The Greek sculptor merely noted what he saw every day of his life. It seemed to him that it would be a very interesting and graceful thing if Birmingham's reliance on the hardware manufacture for much of her prosperity could be indicated to future generations by sculpture. He would like to see somewhere in the centre of the town a bronze statue, executed by the very best artist, of a welder with a gun-barrel in his hands; or of a caster in the brassfoundry, ready to pour the metal into the mould—a true Warwickshire man, in his shirt-sleeves and apron. In speaking of private sculpture, the lecturer observed that a great deal of what was most refined and beautiful was only fitted for the inner room. The prose of the art stayed out of doors, and we kept the poetry in our churches and our houses. He pointed out that in the church there was a wonderful field for sculpture, and in reference to its use in the adornment of houses he offered some valuable suggestions.

### LICHFIELD CATHEDRAL.

A LECTURE on the "Architecture of Lichfield Cathedral" was lately delivered in the Lichfield School of Art by Mr. J. O. Scott.

The Dean of Lichfield presided, and expressed the pleasure he had in introducing the lecturer. They all of them would know Sir Gilbert Scott by fame, and it was his (the Dean's) great pleasure to reckon him as one of his very best friends. Some few days after the Queen did him the honour to appoint him Dean of Lichfield, he met Sir Gilbert Scott in London, who congratulated him very warmly on his appointment, and said in a half-humorous way, "The whole of your west front is faced." He replied that he had been acquainted with the melancholy fact for the last fifteen years, and Sir Gilbert remarked, "Then it will soon be stone." Looking back, however, on what had certainly been a labour of love, he little thought when he announced his intention of trying, with the assistance of the chapter, to restore the west front that, in the course of six years it would be so near completion as he now found it. During the first two years of that work he received great help from Sir Gilbert Scott, and when that celebrated architect died he was succeeded by his excellent son, in whom he (the Dean) thought he saw a remarkable resemblance to his father.

Mr. Scott then delivered his lecture, and in the course of his observations referred to the restoration of the west front. He opposed the idea that the design of the west front had been obtained from France. Although here and there there might be features which some might attribute to French influence, yet he was satisfied that there were no grounds whatever for bestowing on any country but our own the glory of having produced this remarkable and beautiful design. He went on to say: The restoration of this part of the cathedral is a right noble work, of which the diocese, the chapter, and more especially the Dean, may be justly proud. It is more than sixty years since the lamentable decay of the stonework led to its being encased with Roman cement, in which material every detail, as far as it could be ascertained, was reproduced. When this was done, it was a very clever work, on which infinite pains must have been expended; but, in spite of this, the result was utterly unsatisfactory, false, and lifeless. So it remained till the important undertaking of recovering its ancient design and restoring it in its original materials was commenced about six years ago. Although so much had been hidden by the coating of cement, yet, happily, traces of all the mouldings were found when it was removed. Nevertheless, the process of investigating these minute evidences, extending over so great an area, and relating to a design so full of variety and elaborate detail, has of necessity been most laborious. I should be guilty of great injustice if I did not take this opportunity of stating that the work could not have been carried out with such marked success but for the incessant care, the skill, and archaeological knowledge which has been devoted unsparingly to the task by the clerk of the works. The restoration has been truly conservative, and the beautiful result we now see is not due to any cleverness or originality on the part of the architects entrusted with its superintendence, but to its being a faithful and exact reproduction of the original design. Referring to the present condition of the edifice and its past misfortunes, he said that these latter consisted mainly of three: (1) the attacks of the Puritans, (2) the attacks of time, and (3) the attacks of Wyatt. "Of the last, I will only say that every vestige has now disappeared: his glazed screen, his blocked arches, his false mouldings, and his wonderful rearrangement of the choir and all matters of a benighted past. The injuries due to time would not be so serious had the cathedral been originally built in a more enduring stone. All those cathedrals which were built in red sandstone have suffered alike, Chester, perhaps, worst of all, but the decay which has taken place at Lichfield is most lamentable; some parts of the exterior have now been repaired in a better stone, but much still remains to be done; the evil goes on continually, and some parts are in a most serious condition. The Lady Chapel is especially in need of repair, as well as the unrestored parts of the central tower." The Rev. Prebendary Andrew, of Tideswell, moved a



vote of thanks to Mr. Scott for his admirable lecture. The Rev. Canon Lonsdale seconded the motion, observing that, with the exception of Mr. Gresley, he was the only one that remained of those who were engaged in the work of restoring the interior of the cathedral to which Mr. Scott had referred. They heard now much of the restoration of the west front, and very properly so, too, but, as compared with that work, the internal restoration of the cathedral was far more interesting. The excavations brought new things to light hour by hour, and it was difficult to withdraw, even for a short time, from within the precincts of the place. The Canon proceeded to give some interesting reminiscences of the restoration, mentioning amongst other things, that the busts of Johnson and Garrick blocked up two windows, and that their removal called forth loud protests from a relative of Garrick's. The resolution was unanimously agreed to, and Mr. Scott briefly acknowledged the compliment. The Rev. John Graham moved a vote of thanks to the Dean for taking the chair, and the resolution was seconded by the Rev. Melville H. Scott, who expressed his gratification at seeing the workmen from the cathedral present at the lecture. The rev. gentleman also complimented the workmen upon the ability they had displayed in the work of restoring the west front, and congratulated them upon their excellent conduct whilst engaged upon it. The resolution was carried with acclamation, and the Dean, in responding, likewise referred in eulogistic terms to the ability and conduct of the workmen engaged in restoring the west front. The very rev. gentleman also said that because the west front was nearly complete it must not be supposed that there was nothing more to do. Had he 50,000*l.*, he could easily spend it on Lichfield Cathedral. The transepts and the Lady Chapel were crying out for restoration, and it would be absolutely necessary to repair the mischief wrought by natural decay.

#### GLASGOW ARCHÆOLOGICAL SOCIETY.

THE annual meeting of the Glasgow Archæological Society was held on November 22; Professor Young presided. The annual report was read by Mr. W. G. Black, and it stated that the society had been prosperous during the year.

Dr. Young said that the society had urged the citizens to preserve the front of the old college buildings in High Street, and he was glad to say they were successful. They should endeavour to conserve the few objects of interest that now remained in the city and neighbourhood, and especially the line of the Roman wall.

Professor Veitch, the newly-elected president, then delivered an address. After referring to the early interest taken by Sir Walter Scott in antiquarian matters, as illustrated by his first meeting with James Hogg, and his description of Monkbarns, in "The Antiquary," he said that in the novel Scott himself was laughing somewhat at the tastes and pursuits of his own life. He was pausing somewhat to consider whether the whole business was not a huge joke and illusion, and whether he might not turn to something other and better. It was fortunate that he did not abandon this line of interest. Not that Scott ever turned to the scientific side of archæology, but true to the instincts of his genius he kept to the suggestions of the past, and we could now live and rejoice in the universal and everlasting truth of his ideal creations. The truth was that in the days of "The Antiquary" there was a feeling of the need of reason for ancient things, but this was a feeling of impatience, because in those times the explanation of a flint arrowhead or a celt was not forthcoming. At length, however, the scientific method forced itself into archæological study, and then it began its progress. That method was to note, observe, analyse the facts, group together the similar ones, note the points of difference and resemblance, and therein, at least for the archæologist, they would find their purpose and their use, that which was in the thoughts of the men who lived in those days, and whose needs were the same as our own—needs of shelter, clothing, food, needs of defence, and even needs of moral obligation and faith in the unseen. For what archæology teaches, leads to, in its last and highest lesson, is the link of human brotherhood between those whom he (the lecturer) now addressed and the earliest specimen of man whom the rudest implement declares. Having referred to the progress of antiquarian research as to method during the past century, Professor Veitch said the grand principles of that research were these: (1) An exhaustive collection, as far as this was possible, of the objects of the same class; (2) comparison of these, so as to get at the essential points of resemblance, the varying points of difference; (3) comparison of them with the remains—similar remains—in other countries, especially the line of country from Central India across Northern and Central Europe, in particular the whole district of Scandinavia. In this lay the value of great public collections, and he was glad to observe that their secretary, Mr. Black, and the council of the society, had taken steps to obtain accommodation in the buildings under the municipality for objects of antiquarian interest connected with Glasgow and its neighbourhood. This had only been too long delayed. These principles of archæological method seemed to have a very special application to a department of antiquities which had not

been at all adequately investigated—he referred to the hill-forts of stone and earth, the cairns and cromlechs, stone circles on the moorlands, the single standing stones, and not less to those long lines of fosse and mound that were still visible on our hills, over large tracts of country, especially in the Lowlands of Scotland, and in the northern counties of England. The speaker then referred in detail to some of the fosses in the south of Scotland and the north of England, which seemed to be lines of defence. He contended that objects of antiquarian interest were of the highest utility, because they showed the feelings, the hopes, and the aspirations of the people who once used them, and were the link that connected us with the past life of our kind. They threw light on the home life, the manners, the faith, the art of the people of the past—in a word, they showed the progress of civilisation. He thought there was need for the preservation of these old objects. And had this remark no application to our own locality? Were we in the neighbourhood of Glasgow as careful of old remains as we might be, ought to be? Was it not the case that within half a dozen years one of the most interesting portions of the Roman Wall had been cut across, dug, and effaced that two or three commonplace villas might be put up for the sake of their accompanying feu-duties? This society owed it as a duty to itself and the public to make a strenuous effort to preserve all that was left us of national relics and national monuments. It was within the memory of some present when the Edinburgh and Glasgow Railway smashed through the Roman Station at Castle-cary, and had not now left even the fragment of a wall. This, of course, was said to be done in the interest of public utility, but he did not see it in that light. They should object to this wanton destruction of relics of the past unless the sacrifice was required in the highest interests of the nation. In concluding, Professor Veitch said that besides the destruction of annihilation there was the destruction of "restoration." Restoration meant generally annihilation.

On the motion of Mr. John Honeyman, vice-president, seconded by Mr. C. D. Donald, jun., a vote of thanks was awarded Professor Veitch for his address.

Mr. John Coubrough then exhibited a collection of objects from the Tharsis Mines, Spain, and two ancient swords found in Strath-blane.

#### UNIVERSITY COLLEGE, BRISTOL.

THE necessity of a thorough and systematic training for those who intend following the profession of architecture has been felt for many years. The absence of it has been deplored by all interested, especially the leading practitioners in the country, having, as a rule, many pupils and assistants in their offices, who, for lack of early training, are obliged to grope through their work, following their master as best they can, without any clear or definite idea of their art. Precious years are wasted, and what should be precious work is entirely spoilt. It is not, perhaps, until the hard-working assistant gets into the thick of his work, and commences practising on his own account, that he finds how little he really knows of the "art of architecture." But work presses; there is not time to begin again, so he makes the best of it by most industriously working the "business of architecture" instead of "practising the art."

In London we have the University College, the Royal Academy, the Institute, and Association, and other institutions where pupils and assistants may pursue their studies. But what seems to be most urgently required is a course of instruction for those intending to enter architects' offices. A pupil well prepared entering an office would be invaluable to an architect in full practice. Such work as is now being done by the University College is, we are pleased to find, being most thoroughly carried out at the Bristol University College. Bristol is not generally credited with being the fastest place in the world, but in this work it is certainly coming to the front. For some years there has been a steadily increasing civil engineering and surveying class, doing excellent work under Professor Shaw, and this year architecture has been added to the list of subjects taught at the University. Mr. W. Edward Jones, F.R.I.B.A., has been appointed lecturer. The syllabus includes the history of architecture, building construction, the ornamental treatment of material, architectural drawing, &c., and, combined with the civil engineering class, forms the best possible training for those intending to become architects. We notice also a course of lectures now being delivered by Professor Fanshaw on "Greek Sculpture." We must congratulate Bristol on its enterprise, and wish it all success.

Mr. F. H. Fowler has now prepared the seat plans and elevation of the new National Opera House, which Mr. J. H. Mapleson hopes to build on the Victoria Embankment. According to these plans, there will be 460 orchestral and 440 balcony stalls, 90 private boxes on three tiers, 500 amphitheatre stalls, and 860 amphitheatre seats. Bouquet and music counters are provided on the stall level, and on the first tier there will be a spacious foyer, the royal apartments, a ladies' boudoir, and a smoking-room.





Mr. Blomfield, Scott, and Street.

SIR,—Allow me to correct an implied error in my letter of the 17th inst., which you have so kindly inserted in *The Architect*. I have just ascertained that Mr. Blomfield is *not* the architect of the small tower with the heavy peal of bells near Worcester.

Let me mention another amusing blunder of Mr. Street's at Dublin Cathedral. He constructed a strong-room, with thick granite walls and a formidable Chubb door and lock, and then covered it with a lath-and-plaster roof!

Yours obediently,

November 25, 1883.

NOT AN ARCHITECT.

SIR,—I have never been guilty of the manifest absurdity of feeling or expressing indignation at fair criticism, whether anonymous or not. What I have complained, and still complain, of is reckless misrepresentation, and the distortion and even invention of facts in support of disparaging statements and opinions. My protest against a flagrant example of this kind of writing appears to have excited the spleen of certain anonymous scribes who, it may fairly be inferred, see no harm in such tactics. Their effusions might well be passed over in silence, but the letter of "Not an Architect" in your last number is so characteristic an example of the discreditable practice to which I object, that I am tempted to notice it.

In the first place, the writer begins by misrepresenting me in imputing to me a sentiment which I have never expressed or felt. Next, in order to have a fling at Sir Gilbert Scott, he drags his name in by representing me as his champion, the fact being that I have never even alluded in the most distant manner to Sir Gilbert or his works. Thirdly, he asks me two questions, the only apparent object of which is to try to do me an injury by throwing doubt on my professional skill and knowledge.

To the first I reply that after the lapse of twenty years I probably remember more of the occurrence to which he refers than anyone else, and that I am ready to give anyone interested in the matter a full and properly substantiated account of the whole facts of the case.

The second question is clearly intended to lead your readers to believe that I am now making serious mistakes in building some tower near Worcester. The whole thing is pure invention. I have no work of any kind going on near Worcester; nor am I anywhere building such a tower as he describes.

I must leave to those personally interested the task (if they think it worth while) of sifting, and where necessary, contradicting, the other stories which he has been at the pains to scrape together.

Permit me before concluding to say a few words about anonymous letter-writing. It appears to me that ordinary anonymous criticism and correspondence (to which no one of course can reasonably object) is one thing, but that it is quite another to cut into a correspondence hitherto signed on both sides, and to take up the running in a very personal style under cover of a pseudonym. The writers of such letters may protest as much as they like; the natural conclusion will still be that they are either afraid or ashamed to publish their names. The only other possible motive for such reticence—viz., a modest shrinking from publicity—will scarcely, I think, meet with general acceptance. If, however, it be the genuine one, such a rare and laudable feeling certainly deserves encouragement, and I can only say that it will afford me the greatest pleasure to help these gentlemen to avoid all further publicity by having a personal interview (strictly private) with any one or all of them if they will kindly give me the opportunity. Five minutes' quiet talk will often do more to clear up differences than hours wasted in correspondence.

Yours, &c.,

November 27, 1883.

ARTHUR W. BLOMFIELD.

SIR,—Your correspondent "Not an Architect" makes statements as to the work of Sir Gilbert Scott and Mr. Street, to which, as I am unacquainted with the facts, I must leave others to reply; but if they are not more truthful than what he says as to mine at Southwell Minster, they are certainly not to be relied on. As regards that work, first, the roof, which he says was "copied" from St. Albans, was designed, and estimated, and reported to the Ecclesiastical Commissioners in July 1875. The question as to the roof of St. Albans was raised in November 1878. Secondly, "the only mistake possible in a lead roof, viz., putting a straight roll along the ridge," was *not* perpetrated, inasmuch as the sheets are laid, as they ought to be, overlapping the ridge on the two sides alternately; and there is no longitudinal lead ridge, because none was required. As regards the roof of St. Albans Abbey, I would refer you to the concluding paragraphs of a letter of mine which appeared in your paper of January 18, 1879, which are, I think, a sufficient reply to what he says as to my opposition to a roof of high pitch.

Yours faithfully,

November 26, 1883.

EWAN CHRISTIAN.

SIR,—The correspondence about Messrs. Street and Blomfield and Sir G. G. Scott is interesting to hundreds of architects, and may be instructive likewise. No doubt many persons (like your correspondent of the 17th inst.) could name scores of defects and blunders in works built under the name of these and other very eminent architects. But, after all, this does not really detract from their eminence. Three more hardworking men in any profession could not be found. Mr. Street's days of nineteen hours are no secret; and the selection by him of Mr. Blomfield as the architect in whom he believed and trusted, has, we can all understand, greatly added to the number of that gentleman's already—may I say?—too numerous engagements.

But, as to the faults in their work? Is it not the fact that these and other eminent men have allowed themselves to undertake much more work than any architect can see to, in the way that an architect should see to his work? Are there not many men whose work is every way far better than that of, say, Scott's *deputies*, and who *do* see to their work in every department thereof, as it is an architect's duty to see to it? The public do not know (*before-hand*) how very little personal attention they will get from the great architect. It would be more honest if such men would at the outset tell their would-be clients plainly that they could not *duly* attend to the work. If after this it was pressed on them, it would be the client's responsibility. It would be far better for architecture, far better for the building public, far better for the profession (as a profession) if work was more divided between a far greater number of men. Such men as those alluded to, in the crush and press of business, *cannot* give their mind to the thousand and one details, each of which, in its turn, requires their whole mind and thought. So, sad mistakes occur—e.g., new and costly churches let in the wet, because the lead flashings have been omitted, or the slates have had too little lap. On the roof of one such new church 400*l.* or more has just been expended since the death of its truly eminent architect. He *was* eminent, but he had no time to *see* to details. Another very fine new church in the suburbs of London I am watching with interest, as the roof timbers are of pitch pine, and every one really practically acquainted with timber knows that in such constructional woodwork, if pitch pine be used, decay is certain to appear before very long. At another very fine and very costly church, also by a very eminent architect, some of the timbers began to decay before he was well off the ground, and this through what many a man of inferior position would call culpable negligence or ignorance. But it may be rather that the architect "had not time" to see and know that the timber was of prime quality, and that it was duly ventilated.

These instances and illustrations may be multiplied *ad infinitum*. The point of it all is—How may the public be best enlightened as to what they get for their money? and how may the consciences of our most eminent men be awakened to the duty they owe to their clients and to their profession, not to undertake more work than they can give *proper* attention to? Professional jealousy would, I fear, prevent one solution of the problem. But as now, in almost every town of any importance in the kingdom, there are really able and accomplished architects, why should not those men whose headquarters are in London, and to whom are entrusted works in the provinces, seek the assistance of provincial men less encumbered with work, it may be, and on whom reliance may be placed to *see* to the work in progress with the eye of an architect? A clerk of works is all very well in his way; but, with rare exceptions, he is not an architect, and cannot give an architect's supervision. It is the cormorant-like spirit on the part of many of our great architects that has done, and is doing, much to degrade architecture (or at least the work of architects) in the eyes of the public.

I wish I could provoke some of our greater men to take up the pen, and say their say in reply to my presumptuous suggestions.

Yours obediently,

November 26, 1883.

A PROVINCIAL ARCHITECT.

P.S. Your correspondent of 17th inst. refers to Wm. Burges, who too was a very great man; but even as to the Ripon churches, does not your correspondent know the trouble in which he involved himself and his employer? I have lately had before me the drawings by Mr. Burges of a little village church, the orders being to spend 10,000*l.* in *all*. The lowest tender was 18,000*l.*, and this without fittings. An architect, if he deserves the name, should consider the care of his client's purse as one of his important duties.

## CHURCH BUILDING AND RESTORATION.

**Darlington.**—The church of Holy Trinity, Darlington, was reopened by the Lord Bishop of Durham, on the 22nd ult., after being reseated, ventilated, and lighted. The designs were by Mr. G. G. Hoskins, F.R.I.B.A.

**Hunslet.**—The foundation-stone of the church of St. Cuthbert, Hunslet, Leeds, was laid on Saturday last. The materials being used are pressed brick facings and stone dressings inside and out. The architects are Messrs. Perkin & Bulmer, of Leeds, and the contractors Messrs. Longley Bros., of Hunslet.



**Newhall, Burton-on-Trent.**—On Tuesday last the church was reopened by the Bishop of Lichfield, after being enlarged. Formerly it was a plain brick building, consisting of nave and tower only. A chancel, organ chamber, and vestry have been added, and the nave reseated with open seats. The additions are built of pressed bricks, with tracery and dressings of Bath stone; and are in the Perpendicular style. The whole has been done under the superintendence of the architect, Mr. E. Isle Hubbard, of Rotherham. The contractor was Mr. John Slater, of Woodville; the joiner's work being executed by Mr. Samuel Fish, of Hartshorne; and the stonework and carving by Mr. R. Kershaw, of Burton-on-Trent.

### SCHOOL BUILDINGS.

**Baptist Chapel and School, Colne, Lancashire.**—These buildings have recently been opened for public worship. The chapel contains 760 sittings, the seats on the ground-floor being arranged semicircularly, all facing the pulpit, which is of light and dark oak; with choir-gallery and organ-chamber behind pulpit, and gallery all round the chapel. The school contains ten classrooms, and lecture-room for 150; and on upper floor a school assembly-room, 66 feet by 33 feet, with open pitch-pine timbered roof, varnished, and end gallery. There are three vestries to the chapel in addition. The buildings are partly connected, and are faced externally with ashlar stone from Wynewall, and are in the Romanesque style, with a lofty stone pinnacle in front of chapel, and have been carried out from the designs and under the superintendence of Mr. George Baines, architect, Post Office Chambers, Accrington, whose plans were selected in a limited competition. The cost of the works has been about 8,000*l*.

**Pole Street Schools, Preston.**—New Baptist schools are being erected at a probable cost of 1,500*l*., from the designs of Mr. George Baines, architect, Accrington, whose plans were selected in open competition.

**Bury.**—A school-chapel has just been opened at Parkhills, in connection with the Bury Circuit of the United Methodist Free Churches. It is a Gothic building, and is intended to be used as a day and Sunday-school for 350 scholars, and will also be used temporarily as a chapel. The works have been carried out in an excellent manner by Mr. John Inman, builder, Fishpool, Bury, from the plans and under the supervision of Messrs. Maxwell, Tuke & Hurst, architects, Southport. The same firm of architects has also prepared plans for a chapel to seat 800 persons, which is intended to be built on a large plot of land adjacent to the before-mentioned schools.

### NEW BUILDINGS.

**Auction Mart Restaurant, London.**—A new City restaurant has been built by Messrs. Spiers & Pond under the Auction Mart in Tokenhouse Yard. The whole establishment embraces a floor area of 11,800 square feet. The extreme length from the new entrance to the end of the extension under King's Arms Yard is 130 feet. There is ample room to seat 350 guests in the large restaurant, while the buffet and smoking-room will accommodate about 150 more. The alterations to the new and old buildings and the decorations and fittings have been carried out by Mr. Bassett Keeling, the architect of Tokenhouse Buildings. The walls of the restaurant are decorated in "Burmantofts faience," inlaid with Venetian mirrors in gun-metal frames. The ceilings, which are by Messrs. W. B. Simpson & Son, are richly panelled in enamelled iron, with the ribs, moulding, and cornices decorated in leaf and bronze gilding of various tones. The gas-fittings and brasswork are by Messrs. Edgar Keeling & Co.

### LEGAL.

#### County Court, Stonehouse.

(Before Mr. GIFFARD, Judge.)

SNELL *v.* CARNELL.

In this case, Mr. H. J. Snell, architect, Plymouth, sued Mr. James Carnell to recover 12*l.* 2*s.* 9*d.*, balance of money alleged to be due for professional services. Mr. Shelley appeared on behalf of plaintiff, and Mr. Curteis for the defendant. In the beginning of 1881 Mr. Snell was employed by the defendant to prepare plans for the erection of a dwelling-house at Yelverton. This he did, but the railway being about to be made through the property, Mr. Carnell received notice to treat with the company. A price for the land was not agreed upon, and the matter was ultimately referred to arbitration. In anticipation of this Mr. Snell prepared plans showing how the estate might be laid out for building purposes; he visited the property on several occasions, made tracings, held consultations, and so forth. He drew up his evidence, and attended two days at the hearing of the case. The result of the arbitration was that a sum of 502*l.* was awarded to Mr. Carnell,

the railway company having offered 280*l.*, and Mr. Snell's valuation having been 659*l.* The award being above the sum offered, Mr. Carnell was entitled to costs, and Mr. Snell sent in his charges. These charges were taxed in the ordinary way, and nine guineas was allowed instead of 22*l.* 1*s.* 9*d.*, which his client's bill amounted to. The taxation was, of course, as between party and party, but the defendant had refused to pay Mr. Snell the balance which was owing to him.

Mr. Snell, plaintiff, said he had been engaged in arbitrations many times, and about the beginning of 1881 he was employed by Mr. Carnell for the purpose of erecting a house at Yelverton. On July 12, 1881, he saw Mr. Carnell, who said that the railway was coming through his land, and asked him to draw the plans just as if the land had not been cut by the line. He did so, and was afterwards asked to give what was called "local evidence" in connection with the arbitration which ensued out of a dispute between Mr. Carnell and the railway company. He paid several visits to the estate in consequence, drew up his report, and attended two days before the arbitrators. He valued the land which the railway wished to acquire at 659*l.*; the railway company offered 280*l.*, and the award of the arbitrators was 502*l.* His charges for all this were fair and proper, and as low as any charges he had made for similar work in previous cases. His whole bill amounted to 22*l.* 1*s.* 9*d.*, and the sum allowed was 9 guineas. Mr. Snell was cross-examined upon the items as set down in his diary. The witness denied that the time employed as set out in his memorandum represented the whole of his labour in connection with the matter.

Mr. Keats, architect, stated he had looked over the particulars of Mr. Snell's charges. They were very reasonable, and he had been paid similar charges again and again, and sometimes heavier charges. His costs in arbitration were always taxed, but never in one case had he been offered only his charges as taxed.—Mr. J. Foster, architect, gave similar evidence. His charges varied from a guinea to four or five guineas a day, according to the work done.

Mr. Curteis said his client was fighting this purely as a matter of principle; and the action came in bad grace from Mr. Snell, who had already been paid a large amount in connection with work upon this land. Mr. Curteis then called attention to the various items which Mr. Snell had charged for, and compared them with the charges of accountants and solicitors.

His Honour: In Mr. Snell's diary you do not see the process of his work, but only the result. The allowance as taxed is not a stopper against any claim as between solicitor and client Mr. Snell might have.—Mr. Curteis: According to Mr. Snell's books, he was engaged only twenty-two hours and his clerk eight hours, and, taking the ordinary scale for professional men—

His Honour: I never heard of an architect being allowed so much per hour.—Mr. Curteis: Yes, sir; I, as a solicitor, am allowed 6*s.* 8*d.* per hour.—The Registrar: If you didn't get more than that, Mr. Curteis, you couldn't live.

His Honour said something must be paid for a man's experience, knowledge, and the intelligence which he brought to bear in his work. He did not see anything unreasonable in the plaintiff's charges, and he did not agree that the amount allowed on taxation was any criterion at all as to what was justly due.—Mr. Curteis said his client thought he was justified in fighting this as a matter of principle, and making it a test case.

His Honour: I think he ought to have brought some evidence to show these charges were excessive.—Mr. Curteis: Well, sir, "birds of a feather flock together," and it is difficult to get one architect to say another architect's charges are too high.

His Honour gave a verdict for the amount claimed, with costs on the higher scale.

### GENERAL.

**The Royal Scottish Academy**, on Monday, elected as honorary members of the academy Mr. J. W. Oakes, A.R.A., and Mr. Thomas Graham.

**Mr. John Slagg, M.P.**, has presented to the Manchester Art Gallery the picture of *Eve Tempted*, by Mr. R. Spencer Stanhope, which gained the Heywood gold medal at Manchester in 1877.

**Mr. J. S. Crowther**, architect, of Manchester, has prepared plans for the enlargement of the Manchester Cathedral mission church, St. Saviour's, Cheetham.

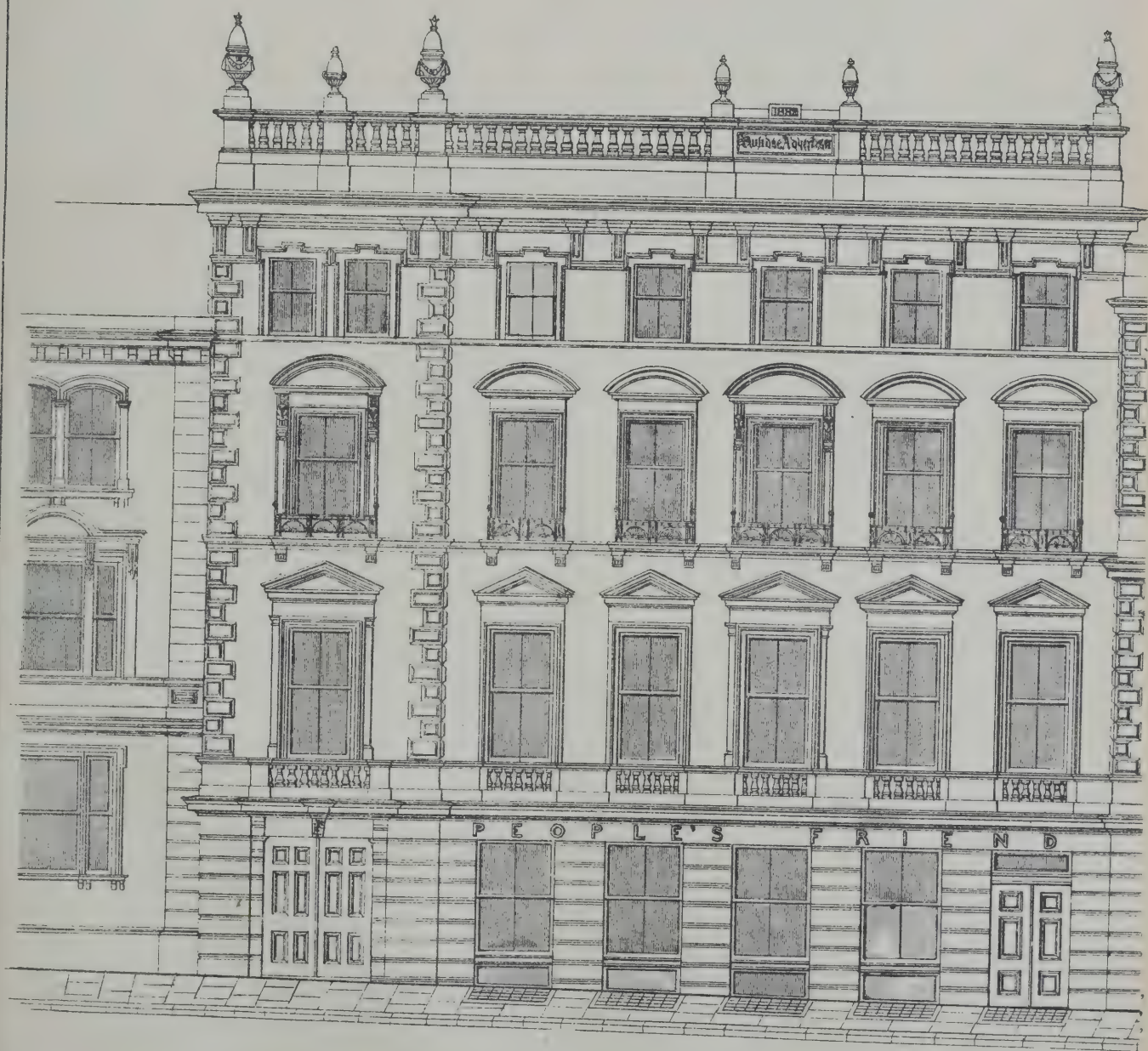
**The "Gazette"** announces a dissolution of partnership between Messrs. Wilson & Wilcox, architects, of Bath.

**An Art School for Putney** is proposed to be established, and a committee is to be formed for the purpose.

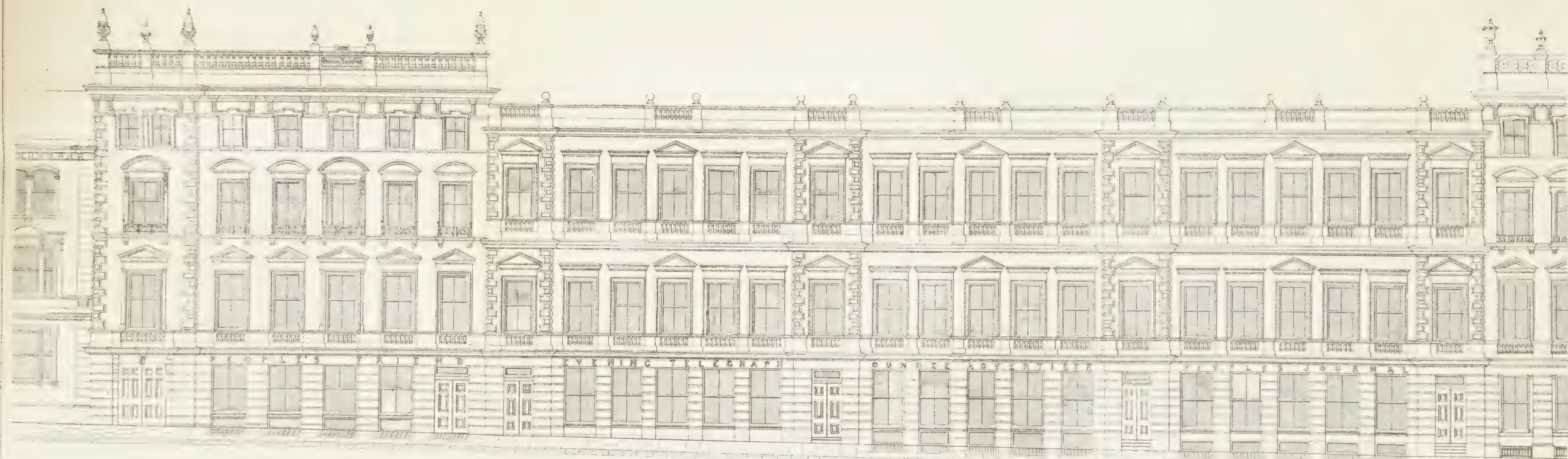
**The Dunfermline Fine Art Association** will open their first annual exhibition to-day (Saturday). Nearly 800 paintings in oil and water-colour, besides sculpture, have been brought together. Among the water-colours are some works of Mr. R. Phene Spiers.

**A Committee of the Liverpool Town Council** have made a recommendation that the sum of 200,000*l.* should be borrowed to deal with the insanitary buildings of Liverpool.









OFFICES OF THE "DUNDEE ADVERTISER" &c., BANK STREET, DUNDEE.

MESSRS C & L OWER ARCHITECTS.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, DECEMBER 1, 1883.

### TENDERS, ETC.

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*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."*

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Our readers are invited to address us on subjects of interest to themselves or the public. We shall be always ready to insert letters asking for a solution of any suitable questions of a professional or practical nature, and to receive replies to such inquiries.

### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 19 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

BIRKENHEAD.—Dec. 1.—Plans are required for Laying-out Bidston Hill for Building Purposes. Premiums of 100 guineas and 50 guineas, and four of 15 guineas each. Messrs. Davies & Stephen, Estate Agents, Mollington, Chester.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of

the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

NORTHAMPTON.—Dec. 1.—Designs are invited for the Erection of a Board School, with Class-rooms and Out Offices, to Accommodate 1,150 Children. Mr. John B. Hensman, Clerk to the School Board, 4 St. Giles's Street, Northampton.

WIDNES.—Dec. 3.—Designs are invited for the Erection of Public Offices. The Surveyor, Public Offices, Widnes.

### CONTRACTS OPEN.

ABERDEEN.—Dec. 1.—For Enlargement of Public School. Mr. Thomas Hector, 81 King Street, Aberdeen.

BALLINDINE.—Dec. 5.—For Building Dispensary and Medical Officer's Residence. Mr. Glover, County Surveyor, Claremorris.

BECCLES.—Dec. 7.—For Building Temporary Bridge Removing old and Building new Bridge. Mr. F. S. Rix, Clerk to the Beccles Navigation Commissioners, Beccles.

BECKENHAM.—Dec. 3.—For Additions and Alterations to Stables and Buildings at the Old Manor House, and Formation of Engine Station and additional Stabling, Cart Sheds, Boundary Walls, &c. Mr. F. Stevens, Clerk to the Local Board, Beckenham.

BELPER.—Dec. 8.—For Alterations and Additions to the Workhouse. Mr. George Eyre, Architect, Codnor, Derby.

BIRMINGHAM.—Dec. 8.—For Supplying and Fixing Speaking Tubes and Electrical Communication, Lift, and Fireproof Doors; also Clock for Tower, Parish Offices, Edmund Street. Mr. W. H. Ward, Architect, Paradise Street, Birmingham.

BIRMINGHAM.—For Alterations to Legge Street Chapel. Mr. E. J. Sherwood, Architect, 101 Queen Victoria Street, E.C.

BLACKBURN.—Dec. 4.—For Extension of Goods Warehouse and other Works. Plans at the Engineer's Office, Hunt's Bank, Manchester.

BOGNOR.—Dec. 7.—For Extension of Groynes. Mr. H. L. Staffurth, Clerk to the Local Board, High Street, Bognor.

BOURNEMOUTH.—Dec. 3.—For Converting Montrose Villa into Coffee Tavern. Mr. C. T. Miles, Observer Chambers, Bournemouth.

BRANCEPETH.—Dec. 5.—For Building Passenger Station. Mr. William Bell, Architect, Newcastle-on-Tyne.

BRIGHTON.—Dec. 4.—For Building Four Workmen's Cottages, Goldstone Waterworks. Mr. P. C. Lockwood, C.E., Town Hall, Brighton.

BURMANTOFTS.—Dec. 1.—For Painting Lodges at Cemetery. Mr. T. Hewson, Borough Engineer, Town Hall, Leeds.

CARDIFF.—Dec. 6.—For Building the Cardiff Exchange, Mount Stuart Square, Hall, Bank Premises, Restaurant, Suites of Offices, &c. Messrs. James, Seward & Thomas, Architects, 1 St. John's Square, Cardiff.

CLAREMORRIS.—Dec. 5.—For Building Dispensary and Medical Officer's Residence, Ballindine. Mr. Glover, C.E., County Surveyor, Board of Guardians' Office, Claremorris.

CONINGSBY.—Dec. 6.—For Building Mortuary, &c., a Burial Ground. Rev. A. Wright, Rectory, Coningsby.



## TENDERS.

## BERKHAMPTSTEAD.

For the Erection of Six Cottages, Berkhamstead. Messrs. BATTERBURY & HUXLEY, Architects.  
NASH (accepted).

## BIRMINGHAM.

For Building School of Art, Birmingham. Mr. WILLIAM MARTIN, Architect, in succession to the late Mr. J. H. Chamberlain.  
SAPCOTE & SONS (accepted).

Total cost without fittings, inclusive of Architect's commission, not to exceed £20,000.

## BRADFORD-ON-AVON.

For Building Brewery Stores, Silver Street, Bradford-on-Avon. Messrs. WEAVER & ADYE, Architects, Devizes and Bradford, Wilts. Quantities by the Architects.

Self, Bradford	£1,087 12 6
Smith, Bath	1,080 0 0
Stephens & Bastow, Bristol	1,073 0 0
Griffiths, Gloucester	1,069 18 4
Newman, Bradford	917 13 0
Long Bros., Bradford	860 0 0
MOORE, Trowbridge (accepted)	836 0 0

For all Work except Mason and Carpenter.

Rossiter, Bradford	195 15 0
Beaven, Bradford	158 0 0
Architects' estimate	1,024 13 0

## CARDIFF.

For Building Higher Grade Schools, Cardiff. Messrs. JAMES, SEWARD & THOMAS, Architects. Quantities supplied.

Gibbons, Cardiff	£12,609 7 8
Jones Bros., Cardiff	12,000 0 0
Fox, Cardiff	12,000 0 0
Gough, Cardiff	11,811 0 0
Shepton, Cardiff	11,651 0 0
Davies, Cardiff	11,590 0 0
Shepherd, Cardiff	11,475 0 0
Parnell & Fry, Cardiff	10,970 0 0
Wood, Malvern	10,860 0 0
BURTON, Cardiff (accepted)	9,913 0 0

## CHEVINGTON.

For Alterations and Additions to Chevington North Schools, Broomhill. Mr. THOMAS DOUGLAS, Architect, Amble. Quantities by the Architect.

Waterston & Stafford	£635 17 5
Grey	467 8 3
Spence	462 0 0
Green & Douglas	457 0 0
CARSE & SON (accepted)	427 18 0
Steel	422 0 0

## CRICCIETH.

For the Erection of a House, &c., at Criccieth, North Wales. Mr. C. JENKIN JONES, Architect, 25 Queen Anne's Gate.

Stephens & Eastow	£15,000 0 0
Perry	14,375 0 0
Gerrans	12,621 0 0
Griffiths, Criccieth	12,220 0 0
Lloyd, Portmadoc	10,605 0 0
Richardson, Portmadoc	9,640 0 0

## DURHAM.

For Repairs at Workhouse, Durham.

Gibson	£35 8 0
Wood	34 9 0
Dixon	32 13 0
Pratt	31 16 0
H. & T. Mowbray	31 0 0
TALBOT (accepted)	24 10 0

## HARTLEPOOL.

For Building Upper Grade School, for the Stranton School Board, at West Hartlepool. Mr. JAMES GARRY, Architect. Quantities by Mr. W. Hodgson.

Cockburn	£4,452 7 0
Harrison	4,440 7 0
Atkinson	4,382 4 6
Sanderson	4,320 0 0
Robson	4,298 7 11
Curson	3,995 0 0
Johnson	3,960 0 0
Beetham	3,859 0 0
HOWE (accepted)	3,820 0 0

## HEMSWORTH.

For an Hotel, &c., at Kinsley, in the township of Hemsworth, near Pontefract. Messrs. Wm. RICHARDSON & SON, Architects, 13 Park Square, Leeds.

Accepted Tenders.

Wainwright, Horbury, excavator, bricklayer, and mason.	
Fox, Ackworth, carpenter and joiner.	
Lazenby, Leeds, plumber and glazier.	
Season, Leeds, slater.	
Kenay, Hemsworth, plasterer.	
Longbottom, Hemsworth, painter.	
Wilkinson, Newcastle, concrete floors.	
Tennant, Leeds, bellhanging, &c.	
Total amount, £1,236 10s. 6d.	

## LEAMINGTON.

For Heating Apparatus for New Schools, for the Leamington School Board. Messrs. GEO. B. NICHOLS & SONS, Architects, 54 Queen Victoria Street, E.C., and Hamsworth, Birmingham.

Jeakes & Co., London	Leicester	Shrubland
	St. Schools.	St. Schools.
	£2465 0 0	(for the two)
Warwick, Leamington	220 0 0	£228 0 0
Fardon, Leamington	228 12 6	—
JENKINS, Leamington (accepted)	148 13 7	171 4 8

## LONDON.

For Rockingham Street School, Lambeth. Mr. E. R. ROBSON, Architect.

F. & F. J. Wood	£9,608 0 0
Goodman	9,099 0 0
W. & F. Croaker	8,859 0 0
Larter & Son	8,849 0 0
Hobson	8,844 0 0
Gentry	8,670 0 0
Lathey Bros.	8,643 0 0
Scrivenor & Co.	8,600 0 0
Tongue	8,583 0 0
Tarrant & Son	8,569 0 0
Shurmur	8,550 0 0
Bangs & Co.	8,534 0 0
Grover	8,529 0 0
Wall	8,504 0 0
Smith & Sons	8,487 0 0
Patman and Potheringham	8,476 0 0
Pritchard	8,447 0 0
Marsland	8,428 0 0
Oldrey	8,400 0 0
Downs	8,389 0 0
Kirk & Randall	8,346 0 0
Shepherd	8,323 0 0
Atherton & Latta	8,300 0 0
Hart	8,273 0 0
Stimpson & Co.	8,257 0 0
Perry & Co.	8,256 0 0
Jerrard	8,249 0 0
Higgs	8,200 0 0
Sargeant	8,165 0 0
Wall Bros.	7,849 0 0

For Block Flooring, Scrutton Street School. Per yard super.

Cox	£0 10 6
Sargeant	0 9 0
Pritchard	0 7 8

For Cleaning School-keeper's House, William Street.

Pardee & Sons	£19 0 0
Oldrey	16 10 0

For Tank, &c., Hart Street School.

Chapman	14 9 0
Davis Bros.	14 7 0

For Building Six Cottages in Bailey's Lane, Stamford Hill. N., for Mr. A. Sanders. Mr. EDWARD BROWN, Architect, Hanbury Street, Spitalfields, E.

CHRISTOFFER (accepted) £990 0 0

For Alterations and Additions to the Highgate Schools, for the Hornsey School Board. Mr. T. C. CLARKE, Architect.

Greenwood	£1,149 0 0
Clarke & Macey	1,103 0 0
Conder	1,083 0 0
Lawrance	1,002 0 0
Mattock Bros.	991 0 0
Ashby Bros.	964 0 0
Grover	930 0 0
Colls & Sons	909 0 0
Williams & Sons	885 0 0
Nightingale	875 0 0
Scrivenor & Co.	855 0 0

For Making-up Gloucester Road, Melville Villas Road, and York Road, Hammersmith. Mr. C. N. RILEY, Surveyor.

Narroway	£1,046 0 0
Tear	591 0 0
Atkins	389 0 0
Nichols	377 0 0
Rowles	350 0 0
Pizzev	338 0 0
NOWELL & ROBSON (accepted)	320 0 0
Surveyor's estimate	413 12 0

Narroway	463 0 0
Tear	272 0 0
Nichols	193 0 0
Atkins	176 0 0
Pizzev	175 0 0
NOWELL & ROBSON (accepted)	162 0 0
Rowles	153 0 0
Surveyor's estimate	200 15 0

Narroway	2,910 0 0
Tear	1,617 0 0
Nichols	1,105 0 0
Atkins	1,035 0 0
Rowles	330 0 0
Pizzev	327 0 0
NOWELL & ROBSON (accepted)	320 0 0
Surveyor's estimate	995 16 8

For Additions to the Workhouse Infirmary, Hampstead, for the Guardians, comprising a Circular Ward for Seventy-two Beds, new Kitchen, Corridors, &c. Mr. CHARLES BRILL, F.R.I.B.A., Architect, Dashwood House, 9 New Broad Street. Quantities by Mr. Henry Lovegrove, 26 Budge Row.

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Josolyne	12,375 0 0
Conder	12,350 0 0
Nightingale	12,246 0 0
Bray & Pope	12,115 0 0
Peter	11,857 0 0
Green	11,840 0 0
Prior	11,760 0 0
Staines & Son	11,688 0 0
Allen & Son	11,680 0 0
Martin, Wells & Co.	11,540 0 0
Gould & Brand	11,471 0 0
Foster & Dicksee	11,222 0 0
Smith & Son	11,164 0 0
Gregar	11,141 0 0
Holliday & Greenwood	10,963 0 0
Bolding	10,919 0 0
Shurmur	10,890 0 0
Hobbs	10,800 0 0
Tink	10,593 0 0
GIBBONS (accepted)	10,409 0 0

Ironwork.

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Shaw & Co.	825 0 0
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WILLIAMS (accepted)	750 0 0

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ELLAND.—Dec. 4.—For Building Mineral Water Bottling Works, Stables, Three Dwelling Houses, &c. The Elland Bottling Company, Spa Well, Elland.

EXETER.—Dec. 4.—For Building Pauper Lunatic Asylum to accommodate 300 Patients. Mr. R. Stark Wilkinson, Architect, 14 Farnival's Inn, London.

FELIXSTOWE.—Dec. 11.—For Enlargement of the Suffolk Convalescent Home. Mr. E. F. Bisshopp, Architect, Museum Street, Ipswich.

FOLKESTONE.—Dec. 6.—For Building School for 700 Children with Teacher's Residence, Boundary Walls, &c., in Black Bull Road. Mr. Joseph Gardner, Architect, 2 Cheriton Place, Folkestone.

FORRES.—Dec. 6.—For Building Pavilion, Enclosing Walls, with Railings, Gate, &c. Mr. John Milne, Architect, Elgin and Forres.

HANDCROSS.—Dec. 4.—For Building Six Houses. Mr. William Buck, Architect, Horsham.

KENDAL.—Dec. 6.—For Building Stable and Remodelling Old Stables. Mr. John Stalker, Architect, 4 Aynam Place, Kendal.

LEEDS.—Dec. 5.—For Alterations and Additions to House and Outbuildings. Mr. W. Hoffmann Wood, Surveyor, 4 Albion Place, Leeds.

LEEDS.—Dec. 11.—For Building Engine Erecting Shop. Mr. William Hill, Architect, 11 Park Square, Leeds.

LEANINGSHEN.—Dec. 31.—For Construction of Large Storage Reservoir with Embankments, Valve Well, Culverts, Gauge Basins, &c. Mr. J. A. B. Williams, C.E., Queen's Chambers, Queen Street, Cardiff.

MANCHESTER.—Dec. 7.—For Alteration and Completion of Portions of the Existing Victoria Buildings, to form part of New Hotel in Victoria Street. Mr. William Dawes, Architect, 2 Cooper Street, Manchester.

MELBOURNE.—For Building Infants' School. Mr. A. Wilson, Melbourne.

MIDLAND RAILWAY.—Dec. 7.—For Building Stores at Midland Hotel, Derby. Drawings, &c., at the Engineer's Offices, Derby.

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NEWCASTLE-ON-TYNE.—For Removal of Pews and Fittings at St. James's Chapel. Messrs. S. Oswald & Son, 2 St. Nicholas' Buildings, Newcastle-on-Tyne.

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PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

SHEFFIELD.—Dec. 6.—For Additions to Netherthorpe School. Mr. C. J. Innocent, Architect, 17 George Street, Sheffield.

SHEFFIELD.—Dec. 8.—For Erection of the Montgomery Hall, New Surrey Street. Mr. C. J. Innocent, Architect, 17 George Street, Sheffield.

SHIPBROOKS.—Dec. 4.—For Building a Residence. Mr. William Buck, Architect, 60 West Street, Horsham.

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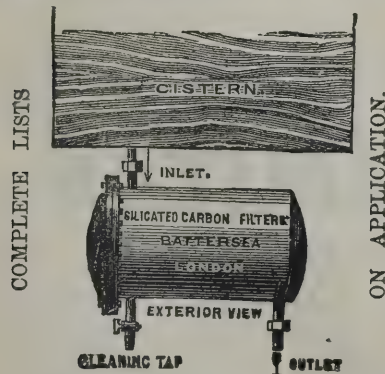
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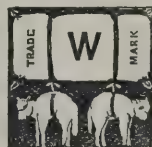
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# The Architect.

## MACHINE-MADE ART.



N the interesting process of artistic development which is so satisfactorily going on amongst us as regards the industrial work of everyday artisan-ship, there is one element which seems to exercise the minds of well-meaning theorists not a little. This is the production of art-work by mechanical repetition; and the latest doctrine with reference to it is that

it must necessarily be fatal to the principle of true art when artificial mechanism takes the place of the natural hand. At the same time the common sense upon which the new criticism professes so much to rely, is forced to acknowledge that mechanism is one of the special powers or forces of the age which it would be idle to resist or even to discourage. The conclusion arrived at for the present is therefore something like this—that machine-made art is a necessary evil for the many, and artistic handiwork a special delight for the few, the progress of culture consisting in the gradual conversion of the majority of vulgarity to the faith of the minority of grace.

Now there are manifestly several important points for consideration here. What is the function of the mechanical in modern art? We might almost say—What was the function of the non-mechanical in ancient art? Indeed, wherein lies the essential distinction between the old non-mechanical and the new mechanical? What constitutes the superiority, positive or negative, of the non-mechanical? Is the inferiority of the mechanical positive or negative?

One of the best illustrations of the case is furnished by ordinary Mediæval church work of any ornamental kind. Take a piece of oak tracery; let us say that the architect has designed certain new cusped panelling to be executed in exact conformity with certain authentic old panelling of which it is to be an extension. There are three ways of doing the work. First, as all the world knows, there are carving establishments where machinery, acting by means of revolving tools directed with accuracy, whisks away the superfluous wood with a precision which is the wonder of all beholders, leaving your cusping at the end so neatly turned out that little more than glass-paper is requisite to make the finish complete. This, we shall say, our architect rejects with scorn, feeling the rather inclined to lead forth on some dark night a band of æsthetic patriots to deal with such pestilent inventions very much as the threshing-machines and turnpike-gates used to be dealt with in good old times that are gone. Secondly, there is the alternative process of working out the cusping by hand. Here the skilful workman takes his pencil and indiarubber, his dividers and compasses, and delineates his subject upon the expectant oak with all the painstaking of an architect's office; then with chisel and gouge, not forgetting the centre-bit, he pursues with delight the shaping of the art-work with a precision, if it comes to that, which no machinery can surpass; until at last, when glass-paper has put on its final polish, the delicacy of the workmanship is exquisite. This process the architect probably approves and accepts with enthusiasm. But there is a third mode of dealing with the subject. For if we examine the old work which is to be imitated, we find that it has been executed not only without machinery, but without even being set out on the wood with drawing instruments. The old-world workman, in a blunder-headed way which is philosophically distressing when tested by modern rule and square, had evidently been in the habit of "making a dash" at his work, and "cutting away at it" with his rude tools so entirely "by the eye," and with a free-and-easy licentiousness so reckless of consequences, that one can only say such a fellow would not be kept an hour nowadays in any well-regulated shop; he would spoil more stuff than he was worth. Looking at the moulding and geometrical carving of "revived" Gothic, as compared with the same work of antiquity, no one who will be candid enough to recognise it can help perceiving the characteristic natural ruggedness of the old and the equally characteristic mechanical smoothness of the new. Indeed, if we may venture the remark without waiting a few years longer, we

would suggest that true Gothic is rugged art or nothing; and if so, the question which we have before us becomes all the more interesting, as to whether it is not in great part a Gothic question.

For, historically speaking, it is only in such art as Gothic—which therefore would be rude if not crude art—that free and easy workmanship has been in any way the rule. The very name *Gothic*, which we are accustomed to be told was conferred upon the remains of Mediæval architecture as "a term of reproach," was obviously so conferred in the interest more immediately of a certain pedantic conventionalised refinement of handiwork which called itself *Classic* because of its admiration for the characteristics of Greek and Roman art, amongst which nothing like the free and easy was ever admissible. Everybody has heard of the curvature of architectural straight lines, practised by the Greeks; and when we are informed that the curves so adopted turn out to be the parabola and hyperbola, we are expected to understand that the ancient artificers not only possessed the means of striking these curves on any requisite scale, large or small, with infinite delicacy, but had previously arrived by the subtlest mathematical calculations at their identity with the precise optical corrections required in all kinds of circumstances. But why should this be so? Suppose we affirm that all Greek curves whatever, whether for moulding-profiles, for entasis, for volutes, or for level lines, were in reality only drawn by the eye? That all such curves would turn out to be conic sections is not at all surprising; indeed it would be surprising if they were not to do so. If, therefore, we say that the Gothic mason did his setting out by the eye, and that the Greek mason did his setting out also by the eye, what then?

In the Greek work every touch of the tool was intended to be absolutely geometrical. When instruments of precision are applied to the finished execution, there is no deviation discoverable from the most uncompromising hard metallic certitude. The capitals of the Erechtheum might just as well have been so many castings from one iron mould. The running ornament in all cases might just as well have been so much of the same kind of casting cast by the yard. The whole production of exquisite marble might just as well have been in crystal or in steel. The Romans followed the same principle; and it was only when barbarism began to creep over the Roman world that coarse workmanship came to be tolerated, "then pitied, then embraced." In the rude Middle Ages it was delighted in, and, in accordance with a strange law of development, instead of a blemish it became at last an essential grace. Connoisseurs—indeed, we are all connoisseurs so far in these days—discover in work that is very much more free and easy than the Gothic ever was—quite Antipodean work—that it is the freedom from restraint that is the beauty. And yet, in the wildest times of the Gothic revival, no man in his senses, perhaps no one out of them, was ever heard to say that Greek architecture was obnoxious because of its perfect refinement of geometrical manipulation.

What, then, would the Greeks have done if they had possessed our machinery for artistic manufactures? It would be a bold man that would say they would not have used it, and indeed used it to the utmost advantage. Even in the thirteenth century, we will venture to suggest, there was no academical rule of æsthetic effect which would have called for the rejection of mechanical aids. But what would have been the destiny of Gothic development if the machinery of that age, instead of being so primitive as it was, had been as complex as our own, might be an interesting question for speculation.

At all events, in these days of ours the assistance offered by machinery and mechanical processes for the production of beautiful things it would be more than preposterous to reject. No doubt there is in non-mechanical products a charm which is distinctly recognisable by the expert, and which he is fully entitled to magnify. When it has no other value, it indicates at least the intelligence and patience of human hands and eyes, as distinguished from the clatter of a spinning-jenny or the thump of a steam hammer. But who is so bold out of Bedlam as to tell, for example, a sober-minded Englishwoman to forswear figured silks and laces and revert to the mere "spade labour" of embroidery by needlework as her only wear in honesty? An Oriental carpet, with its quaint crudeness, and indeed blundering unshapeliness, all over, speaks of manual dexterity, no doubt, even if it be sometimes not above a very low level of both brains and breeding; but surely we



are not, for the sake of such handicraft as that, to repudiate the claims of European manufacture, in which far higher mental forces multiply their power indefinitely by the aid of the most exquisite instruments! Are not these very instruments the wonderful work of man?

The interests of art manufacture in England demand something quite different from a sweeping discouragement of all mechanical apparatus. It is palpably foolish criticism that merely rails at machinery and puts its faith in antediluvian spade labour. In a little time all this fanaticism will have volatilised into the empyrean of ridiculous opinions, and the true intelligence of the country will look forward to a greater and greater expansion of the happy influence of the beautiful by the increasing refinement of a thousand marvellous appliances of art.

#### THE WATER-COLOUR SOCIETY.

THE winter exhibition of the Royal Society of Water-colour Painters presents some novelties. In the first place a happy change is made in the disposition of the room as regards the screens, which are now limited to two, placed in the middle of the gallery, towards the centre, and hung on both sides with drawings. This arrangement is a great improvement; it leaves the corners of the room free and well lit, and makes circulation on crowded days far easier. The seats are now only the large settees and chairs, but this really is ample for a gallery of the size. Then, as to the drawings, the members seem to have availed themselves more widely than heretofore of the variety of method permitted in the sketch and study exhibition. Mr. POYNTER, R.A., sends two pleasing heads in red chalk; Mr. DU MAURIER shows black-and-white illustrations for *Punch*; Professor RUSKIN, hon. member, contributes pencil studies of objects in the British Museum, a *Twelfth Century Capital* from Avallon, a sketch of the *Bay of Naples*, with a touch of colour on the mountains, and so forth; and Mr. ANDREWS hangs a large and ambitious study in monochrome, of two men-of-war *Fighting at Sea Long Ago*. More work in black-and-white and sepia, careful pencil and point drawings and studies in chalk would be a welcome and instructive variety in this winter exhibition, and we hope to see an increase in the direction of such student drawings which, though not so popular with "the general," would always command their value from the discriminating dilettante.

Not by way of disparagement, but rather of welcome, we may say that there is nothing fresh to comment upon a large quantity of the drawings, simply because the subject-matter and the style of the artists is, however pleasant, so well known that, if blindfolded, one could, at mention of a name, describe pretty accurately a number of the studies exhibited. Thus with the veteran Mr. F. TAYLOR, with Mr. THOS. DANBY, Mr. RICHARDSON, and many others, including, it must be acknowledged, that delightful and popular painter of rustic life and scenery, Mrs. ALLINGHAM. A member of the Society who has always something fresh to say is Mr. ALBERT GOODWIN, by whom, besides certain Italian sketches of a poetic veracity that only old lovers of Italy can fully appreciate, is a study of *A Sunlit Valley*, put in with a breadth and limpidity of touch that will astonish people who know only his dainty and deliberate finished work. Mr. ALFRED FRIPP, like Mr. GOODWIN, has a fine sense of those effects of gradation and quality of light which escape common observation; in *Durdle Door, Coast of Dorsetshire*, he gives all the tenderness of after-glow and opalescent half-light on a curve of beach, irregular cliff, and gentle green sea. The water is the only part of this drawing that a little jars the chord of colour; it seems to us rather too uniformly emerald. A single picture by Mr. NORTH, hung on one of the screens, has brought the right acknowledgment from the Society in a vote of full membership. It is merely a fantastic ochre-coloured palace at *Biebrich on the Rhine*, which has a circular block surmounted by a parapet and sculptured forms seen against the sky; in front a row of round-headed acacias in autumn gold, a glimpse of pale-shining water and of far-away mountain line, and a figure or two. The subject would certainly have attracted few; but by an execution of singular delicacy and a subtle management of warm light, transparent and brilliant to a degree, and yet soft and quiet throughout, Mr. NORTH has made out of nothing a gem of artistic worth.

In contrast to this work and to all work of the suggestive and assiduously delicate order are the studies of some recent members. Mr. C. GREGORY, for example, who received full honours at the same election as Mr. NORTH, is by contrast literal, trenchant, assailable. And yet is he also admirable, also brilliant, and holds forth certainly as much promise as any of the younger men. He shirks no detail, no difficulty in his many studies, too numerous to dwell upon singly; he is fond of a jumble of odd lines and queer perspective planes, and of "roba" of all kinds; paints the backs of houses in country towns, with courts and gardens and outbuildings—untidy picturesque places—with appropriate figures of pleasant everyday life; he is eminently cheerful and veracious in rather a prosaic, but clever and determined way; is sufficiently individual, moreover, to emerge by-and-by from all this careful imitative work into higher lines of selection and effect. The figure-painter, Mr. WAINWRIGHT, of north-country vigour, is strong and disagreeable in the study of a lady in black dress and hat, lolling in a chair against a background of brightly-figured tapestry, weary of *Le Monde où l'on s'ennuie*. Ugly rather than gracious, too, but undoubtedly clever, is the study by Mr. BREWTNALL of a girl in dark chapeau and wraps, turning her face aside in swift onward step to glance at the little dead bird on the snow, killed by *Cruel Winter*. At the same time there is always a thought behind Mr. BREWTNALL's abrupt manner: he designs with an intellectual purpose. Mr. GLINDONI's excellent draughtsmanship, good technique, and narrative faculty are, as is too often with him, marred by a disagreeable palate and a touch of stage situation in the pictures *Deceived* and *It might have been Worse*. These are among the many contributions which can hardly come under the title of either sketches or studies, if the latter be accepted as meaning in any sense preparatory work. Among the landscape members of mark many are absentees from this exhibition, notably Messrs. GEORGE FRIPP, A. HUNT, and GEORGE BOYCE, while Mr. POWELL only sends one drawing. To make amends we have the unusual apparition of a number of little deep-coloured sketches of effect by Mr. HOLMAN HUNT; a bit of coast, *Chidcock Beach*, by Mr. MARKS, R.A., who somehow seems to put into inanimate nature some of the quaint individuality with which he endows humanity; and much good work from Messrs. THORNE WAITE, W. PILSBURY, HERBERT MARSHALL, H. MOORE, and J. D. WATSON, to whom *genre* or landscape study come with equal ease; and a lovely sketch on *Loch Marée* by Mr. M. HALE, which suffers, like so many of its neighbours, by a white mount.

This question of mounts is a crux in the winter exhibition. Certainly the greater number of the drawings lose quality by the rule, and it must be remembered that in the close hanging each drawing has the margin doubled by the mount of its surrounding neighbours, the effect of which the intervening frame is not strong enough to overcome. Why toned mounts are not oftener used is a matter of surprise. Furthermore, the general effect of the gallery is much marred by the glare of the mounts. Indeed, the hangers seem to have given up their duties in despair, and let the hanging go by mere questions of seniority or of carpenters' fit, as the case may be. The culminating failure is the head of the room, where a large drawing in pale greys and greens, *Canadian Falls, Niagara*, one of two contributions from H.R.H. Princess LOUISE, is hung beneath a head of *Hassan Ben Moosa*, in Mr. HAAG's most assertive style, framed ornately in dark wood, while around are grouped some of the least effective drawings in the room, or, at any rate, least effective in this juxtaposition. Members whose drawings hang on the screens fare better. Naturally in a central position here has been placed the solitary but eventful contribution of Mr. ALMA TADEMA, R.A., *A Declaration*, wherein the actors of the story are in the fashion made so familiar to us, attired in classic robes, although their faces date within our circle of London to-day, seated on a carved marble bench of illusive silvery grain, with a blossoming Judas tree and a grey blue sky behind to give sweetness and glow. It is said that the value set on this by no means highly-finished or large drawing is about equal to the income of a good college living, or the cost of a race-horse, or the price of a diamond aigrette for my lady to wear on gala days.

In addition to the artists already named as elected to full membership must be included Mr. POYNTER, R.A., Mr. MARKS, R.A., Messrs. BREWTNALL and HERBERT MARSHALL.



Mr. J. H. HENSHALL has been admitted associate, and will strengthen the ranks of the "positive" school of figure painters.

#### DR. SCHLIEMANN'S TROJA.\*—II.

IT would be difficult to find a book that is a better commentary on JULIET's question, "What's in a Name?" than Dr. SCHLIEMANN's new volume. The author and his admirers—or, in other words, the greater part of the readers of the book—take an interest in Hissarlik, and in the objects there discovered, because of the influence of the magic word "Troja." If they were judged by their intrinsic merits, the products of the excavations would have attraction for few except the members of the small Anthropological Society. There were not many things met with which would be considered worth the attention of the antiquaries who meet in Burlington House; and it may be predicted with confidence that Dr. SCHLIEMANN's discoveries will never induce the Dilettanti Society to expend a shilling in the further exploration of the "Plain of Troy." Dr. SCHLIEMANN attributes great importance to the collection of pottery and other work which he exhibited at South Kensington, and which is now in Berlin. It was curious, and some of the jars were remarkable for their capacity, but few of the examples had any claim to be called beautiful. They all were indicative of a low degree of civilisation, and the remains of builders' work figured in Dr. SCHLIEMANN's book correspond with them. In prehistoric objects art is rare, and those from Hissarlik were, as a whole, neither better nor worse in style than objects which have been exhumed in many parts of the world. If Dr. SCHLIEMANN's property had been added to the Christy collection, it would not appear remarkable, or separated by any novel characteristics from the other examples of the ancient potters' or metal-workers' craft. But one does not associate epic poems with the Christy or Lane-Fox collections, and why should we do so with the Schliemann collection? It is difficult to define the relationship between a poet and his times; but if we judge by what occurred in our own early literature, we may say that the poet's surroundings were superior to his art. When the English muse could do no more than prattle in rhyme there was a noble architecture, and therefore the subsidiary arts connected with building were in an advanced state. We are far from asserting that Greek architecture and craftsmanship was in HOMER's day as superior to the "Iliad" as an Early English cathedral is to our Anglo-Norman metrical romances. But what we do say is that both "Iliad" and "Odyssey" refer to a condition of art which has no correspondence with anything that was found by Dr. SCHLIEMANN. To ask us to believe that ANDROMACHE and HELEN worshipped such hideous things as the "headless female idol with an incised ornamentation," or the abominable "female idol of bronze or copper," or drank out of the amorphous "vase with four feet in the form of a cat," should be accounted a sort of instigation to leze majesty and punished accordingly. If we must accept the Hissarlik remains as having inspired HOMER, the charm of his poetry has vanished. Dr. SCHLIEMANN has evidently a sincere admiration for the old poet, but there never was a man—and we are not forgetting the translators—who has done so much to convert the poetry into prose. He has an unhappy talent for degrading the loftiest conceptions. When he ascended Mount Ida Dr. SCHLIEMANN tells us he repeated several times the verses describing the scene between JOVE and JUNO, but in spite of his enthusiasm the whole Troad, with its hills and rivers, appeared to be "on a plate!" He tests the power of the god's eyes by his own. Because his vision was limited so was JOVE's. If Dr. SCHLIEMANN had explored the top of the hill who knows but Fortune, who has been so favourable to him, might have revealed the very telescope or field-glass which JOVE was obliged to use whenever it was necessary to survey mankind from Ida? People who accept Dr. SCHLIEMANN's revelations will rejoice to learn that the lotus which sprung forth to form JOVE's couch was a kind of clover (Dr. MAHAFFY will probably say the shamrock is the exact species), and that the hyacinths gathered by the Doctor are "decidedly identical with the Homeric Hyacinthus."

The world will insist, for a while at least, on identifying Hissarlik with Troy, and if people must have a material city miraculously preserved for their edification, Hissarlik will serve as well as another. But it seems to us that the true way to gauge the worth of Dr. SCHLIEMANN's explorations would be by first eliminating all notions of HOMER and Troy. We have at Hissarlik the site of various settlements, and enough materials exist to help us to illustrate different degrees of civilisation. A part of the materials has been made available, and scientific archæology is indebted to Dr. SCHLIEMANN for what he has done during more than ten years, but much more may be done by him if he will forget HOMER and think only of History. So much is revealed to us in "Troja" we cannot but regret that more important information remains entombed through the influence of a hobby.

Dr. SCHLIEMANN claims a capital importance for his explorations in 1882 on account of the light which they have thrown upon architecture. One discovery was, he says, in connection with the defensive walls and walls of houses in the city he calls Troy. As we have already mentioned, they were made of unburnt bricks, and in some places were baked *in situ*. Everyone knows that unbaked bricks or courses of mud are a primitive mode of construction, and have been found in many parts of Asia and Africa. NIMROUD's palace, if we are to accept RICH's account, was "built with unburnt brick, mixed up with chopped straw or reeds, and cemented with clay-mortar of great thickness." There are expressions in the scriptures which may be supposed to refer to work of that kind, as when EZEKIEL says, "I digged through the wall with mine hand." The Greeks called a house-breaker a wall-breaker, and JOB speaks of those "who dwell in houses of clay whose foundation is in the dust." The wall on the east of the Acropolis in Dr. SCHLIEMANN's second city differs from the ordinary clay construction, as the western side has been dried by means of a fire; the nature of the ground did not allow of the drying of the eastern side. A fire appears to have been lighted at the base of the wall, and, in order that some of the heat might reach the interior, openings were left at regular intervals, which were afterwards filled with stones. Dr. SCHLIEMANN's architect was able to discern differences in the colour of the walls, which arose from the varying influence of the fire:—

Dr. Dörpfeld observed round the channel, first, a circle which had been completely raised to a glowing heat throughout, and has now a light colour; this is followed by a black ring, which has received its colour from the black vapour of the fire. Still farther from the channel the bricks are completely baked, and have a dark red colouring; the joints, which consist of another material, being light red. The farther the bricks are distant from the channel the less red is their colour, and the less thorough their baking. In the less baked or badly baked portion of the wall the shells contained in the bricks have preserved their white colour, whereas in the thoroughly baked portion they have been blackened by the fire. The wall is covered on both sides with a clay coating 0.001 mètre thick. It is highly probable that the brick wall of the second city was built throughout in a similar manner; but this is certainly the first example ever found of a citadel wall having been erected of crude bricks, and having been baked *in situ*.

There are several examples of this class of work. One is in connection with the remains of a temple. But even more remarkable is the discovery that the projecting ends of the clay walls of the pronaos of this temple had been cased with vertical timbers in order to preserve them. The thickness of a wall was about 4 feet 9 inches, and as there were six pieces of timber, the average size of each was about 9 inches square. They were placed on foundation-stones, a wall plate intervening. From this discovery the stability of the ancient clay walls is more easily understood, and it may be assumed that the parts which were liable to injury were always protected by wood.

But the discovery also suggests that *parastades*, or the timber casing of unburnt bricks, was the original from which the antæ which are found in Greek temples of a later date were derived. The Doric and Ionic antæ are merely ornamental, but the primitive antæ may have helped to take part of the weight of the roof, besides protecting the walls. That the antæ were under some traditional *régime* is plain from their treatment. In Doric temples they were without flutings, and the caps differ from the capitals of the columns, while in Ionic examples among other differences there are the two planes in the shaft, which are difficult to explain.

\* *Troja: Results of the Latest Researches and Discoveries on the Site of Homer's Troy.* By Dr. Henry Schliemann. John Murray.



The remains of what Dr. SCHLIEMANN calls "the Greek and Roman Ilium," and which are nearest the top of the hill of Hissarlik, are not of great interest. Part of a wall for defence was found, having rusticated courses. All the more ancient buildings, with one exception, are built of a shelly conglomerate, "whereas those of the Roman time consist for the most part of marble with foundations of a soft calcareous stone." It is worth noting that in the Roman wall every stone that is visible bears a mason's mark of a single letter, while in the large foundation-stones there are generally two, or an attempt at a monogram. Fragments of a small Doric temple were found. It was evidently rude in style. There are twenty flutings in the shaft of a column, and the echinus, instead of being a fine elliptical moulding, is almost a straight line. Under the triglyph there are only five guttæ, instead of the customary six, although on the mutule above there are six. Some fragments of a larger temple are also illustrated, but the artist has made the flutings of the column convex instead of concave, so that they look more like cablings. We are informed that "the roofs, as well as the panelled ceiling were of marble," and that large marble blocks of the strotæra ceilings have escaped destruction, partly because they were too heavy and unwieldy to be moved and to be cut into splinters. On this subject the Doctor might well have allowed his architects to give us more information. Parts of a Doric Propylæum were found, and it is supposed to have led to the Acropolis. Dr. SCHLIEMANN says it is Roman work, and indeed a Greek would disown it. The theatre is described as having been magnificently ornamented with Doric, Ionic, and Corinthian columns. A slab is engraved on which ROMULUS and REMUS with the wolf are shown. It is more remarkable for the arrangement than for the execution. In the middle are the wolf and the children, above are a couple of stags apparently feeding on trees, while beneath is a grotto with a satyr. A Corinthian capital from the theatre is of a better type than was to be expected in so remote a place.

Between the "Second City" and the "Greek and Roman Ilium" there is a wide interval of time represented by the intervening strata, which have not been thoroughly explored. In the third settlement there was no great advance over the one below, for we are told that "the houses with but few exceptions cannot have been more than one storey high. They have no particular characteristic ground plan, but consist of several small chambers irregularly grouped, the walls of which are not even parallel." The custom of baking the bricks when the walls were formed was also adopted. The builders in the fourth city were of an economical turn of mind, like our modern builders of suburban villas. They used the walls of their predecessors, and the houses and gates of the two periods appear to have coincided in position. The walls are generally very thin, and it is supposed that the houses could have had but a single storey. There was a larger area in the fifth city, but the walls of the houses were generally of unbaked clay. About the sixth or "Lydian" settlement, so little is said by Dr. SCHLIEMANN, a reader can hardly fail to conclude that Professor JEBB was right when he said that the Lydian settlement had no real existence, and should altogether disappear from the section.

It is the opinion of Field-Marshal MOLTKE that Bounarbashi, from its strategical importance, is more likely to have been the site of Ilium. Dr. SCHLIEMANN appears to have again examined that site as well as others in the district, but his confidence in Hissarlik remains unshaken. He has also travelled elsewhere in Greece, and gives in "Troja" an interesting account of what he saw. Professor VIRCHOW has said that Dr. SCHLIEMANN's excavations, apart from their connection with the "Iliad," have an "imperishable value," and whenever the results are considered in a scientific way that phrase will express the opinion of archæologists. But at present they are regarded from an imaginative standpoint, and therefore justice is not done to them: they are esteemed for what they are not, rather than for what they are.

A Winter Garden and Lounge has been added by Baron Huddleston to his residence at Ascot, connected to the dwelling-house by a corridor. The work has been carried out by Messrs. Messenger & Co., horticultural builders, of Loughborough. The interior is fitted up with rockwork and fountains by Messrs. Nieman & Cornish, of Orchard Street, W.

## PARIS NOTES.

THE general meeting of the Society of French Artists was held last week at the Palais de l'Industrie, under the presidency of M. Bailly, supported by the other office-holders of the association. According to the treasurer's report, the assets amount to 355,448 frs. 45 c., against which there are no liabilities whatever; 200,000 frs. are deposited as a reserve with the Caisse des Dépôts et Consignations, and the remainder is invested in Government securities. The meeting decided, in opposition to the opinion of the managing committee, that the meetings of the various sections of the society shall be held before the regulations of the annual Salon are drawn up, a month previous to the meeting of the committee for that purpose.

The exhibition of drawings by modern masters from the year 1783 down to the present day, to which reference was briefly made in last week's *Architect*, is being organised by the Society of Artist-Painters, Sculptors, Architects, Engravers, and Draughtsmen, founded by Baron Taylor in 1844—a body now numbering upwards of 7,000 members. The Minister of Public Instruction and Fine Arts has placed the galleries of the Ecole des Beaux-Arts at the disposal of the society for the above purpose from February 1 next. A special managing committee has been formed from among the most prominent members of the association, who will be entrusted with the selection and arrangement of the exhibits. The proceeds of the exhibition will be applied to some charitable purpose in connection with art.

An important set of fresh regulations to be complied with in the construction of new buildings within the Paris boundaries has just been issued. The most noteworthy provisions are as follows: (1) The roof-ridging must form a passage at least 28 inches wide, and be accessible to the firemen and inhabitants in case of fire; it is to be bordered on one side by an iron rail placed at a height of 12 inches. (2) Around the edge of the roof there must be an iron parapet at least 32 inches high, with uprights and rails, the open spaces of which are to be strongly trellised to prevent the fall of firemen, workmen, or of materials, when repairs are being made. This parapet may be made in ornamental open ironwork, but must always be surmounted by a hand-rail. (3) Iron bars forming a ladder provided with hand-rail are to be cemented into the masonry for the entire height of the common walls and of the party walls running at right angles to the frontage on the street, courtyard, or garden; this ladder must be built in the wall itself, and supported in no way by the roof. A means of issue must be provided, either by a garret window or a trap-door in the roof itself, to enable the inhabitants to gain these ladders easily in case of fire. (4) Wherever possible there must be two staircases in each house, issuing by different doors; and, in cases where this is found to be absolutely impossible, iron ladders of the kind above referred to must be established throughout the whole height of the courtyard front.

The *Venus of Milo* is not at present to be found in its accustomed place at the Louvre. The gallery in which it was exhibited has been found to be affected by damp, and the ground beneath is to be vaulted in order to prevent the injurious humidity. The statues that surrounded the *Venus* have been removed to the room known as that of the "Héros Combattants," while the *Milo* itself now reposes, in its three fragments, on straw in one of the store-houses of the museum. To prevent visitors being entirely disappointed, an exact reproduction of the statue has been executed in plaster and placed by M. Ravaissou in the room containing the Ducaze collection. The excavations above referred to will require a year for completion, and are a continuation of the work commenced some years ago under the Musée des Antiques. The soil is to be taken out to a depth of nearly 12 feet under the whole of the ground floor galleries; and the cellars thus made will be vaulted in masonry or roofed with iron beams.

Especial interest will attach to that part of the new basement in which were lately discovered the ruins of an old building of date anterior to the reign of Francis I. These remains, buried at a depth of 13 feet, have been cleared, and appear to be those of an oratory with its dependencies. No reference is made in the archives of the Louvre to the existence of any such ruins, and some hopes are entertained that the further excavations may result in other finds of a like nature.

The Louvre authorities have just purchased for 8,000 frs. a remarkable specimen of decorative sculpture, in the shape of a



house door, coming from Valentia, in Spain, and dating from about the year 1490. Two piers, made up of several small columns, support a large pediment, surmounted by a group representing the *Annunciation*. The sculptor has sought to lead the look up to this by a succession of angels' faces and scrolls all directed upwards. The two figures of the group face one another, the Virgin in a kneeling position on the right, and the Archangel upright and opposite to her, with a lily in his hand. This door gave entrance to the mansion of Sorell, the treasurer of Charles V. He was condemned to death for peculation.

The celebrated Gallo-Roman remains, exhumed by the Père de la Croix at Sanxay, are threatened with destruction by process of law. The reverend father writes to one of the Paris papers to say that he has been summoned in due legal form before the Poitiers Civil Court by the owner of one part of the soil in which his excavations have been made, to demolish the temple, baths, and theatre of the discovered town, and restore the land to a fit state for cultivation. There can be no question as to the law on the matter, and in default of intervention on the part of the Government, M. de la Croix will certainly have to comply with the summons. The case affords, however, an amusing instance of the often-conflicting nature of legal enactments; for had the owner's wishes been immediately carried out by the Père, the latter would have laid himself open to a suit for damages from the Government, which possesses his legal offer of the site and ruins as they stand—an offer that can be closed with at any time before a certain specified date. Of course, it appears impossible to admit for a moment that the perpetration of such a piece of vandalism can be allowed, and the State will doubtless interpose, and expropriate the land to its own use. The Historic Monuments Commission has already voted 10,000 frs. towards the preservation of the ruins, and the Council-General of the Department in which they stand has also offered to contribute for the same purpose. Moreover, a petition to the Minister of Public Instruction and Fine Arts praying him to hasten the acquisition is being prepared by all the archaeological societies of the country. As the matter at present stands, it is possible that a special Act of Parliament will be required to counteract the inevitable decision of the local tribunal, and save the invaluable remains from destruction.

The Académie des Inscriptions et Belles-Lettres last week held a special meeting to elect successors to the two seats vacated by the deaths of MM. Laboulaye and Dufrémery. By the almost unanimous vote of the members present, M. Paul Meyer, Director of the Ecole des Chartes, was elected to replace M. Laboulaye, and M. Maspero, the well-known Egyptologist and Director of the Boulaq Museum at Cairo, was named to succeed M. Dufrémery.

### LORD OVERSTONE'S PICTURES.

THE high position which Lord Overstone, says the *Times*, so long held as a trustee of the National Gallery was not derived only from his having formed a collection distinguished above all private galleries for the finest masterpieces of the Dutch School and those works of Murillo and Claude which gave it a European reputation, but from his fine taste in art, tempered with sound judgment, directed by a public spirit and an earnest concern that grand pictures should be brought to exercise their elevating influence upon the people. One day Lord Overstone noticed a good picture on the walls at Christie's, and took Sir Charles Eastlake to see it. They took their seat near the auctioneer; biddings began and went on, one opponent standing in the crowd at the back of the audience. As the biddings had now reached the highest point Sir Charles thought proper to go, he and Lord Overstone decided to give up to their opponent, and they missed their bargain. As they were leaving the room together, who should come up to them but Mr. Gladstone, who began expatiating on the merits of his purchase to their mutual astonishment. The picture might possibly have been the fine Bonifazio of the Beckford collection, which was long an ornament in Mr. Gladstone's collection, and which was sold with the rest of the Prime Minister's works of art in 1875, when Lord Overstone bought it, as did also the large onyx cameo of *Zeus and Thetis*, which is engraved as the frontispiece to Mr. Gladstone's "Homer." The Overstone collection has not been seen by the general public in consequence of the pictures being hung in the house in Carlton Gardens—the house which he bought of the widow of Mr. Huskisson soon after the sad railway accident by which the Minister was killed. The principal pictures, however, were lent to the famous Art Treasures Exhibition, of which Lord Overstone

was a great promoter; and more recently some were contributed to the first Exhibition of Old Masters at Burlington House. At the old British Institution some of his pictures were always to be seen. At Carlton Gardens there are about seventy pictures, nearly all of first-rate interest, and of the Dutch and Flemish painters. Nine of these may be called masterpieces of their kind, and at the head of them stand a superb *Waterfall*, by Ruysdael, a large work in an absolutely perfect state, as fresh as it left the hand of the master; an equally fine *Water Mill*, by Hobbema, in his purest and richest colour; two Vanderneers, a moonlight and an evening wood scene; a Rembrandt, portrait of an old lady in a ruff; Jan Steen's *Twelfth Night*; a delightful little Vandervelde calm, and a fine upright Hackaert. These all came from the collection of Baron Verstolk de Soelen, one of the most celebrated private galleries at the Hague. This collection was bought *en bloc* by Lord Overstone (then, in 1846, Mr. Samuel Jones Loyd), Mr. T. Baring, and Mr. Mildmay. The story of how these three connoisseur bankers divided their bargain is told by Lord Overstone. They met to make their choice, but every man wanted the best pictures. At length Mr. Loyd proposed they should settle the point by an auction among themselves, and he officiated as salesman. As it turned out, he seems to have beaten his companions, at any rate, with the Ruysdael and Hobbema, which are pictures without a rival. From the Redleaf collection, Mr. Wells's, sold at Christie's in 1848, came a very beautiful De Hooe, *Courtyard of an Inn*, and a remarkable Isaac Ostade, *The Country Inn*, a large upright picture; and the lovely landscape by Claude, so celebrated under the name of *The Enchanted Castle*, the drawing of which is in the "Liber Veritatis," the picture being painted in 1664 for the Conestabile Colonna at Rome. The picture represents the Castle of Falkenstein, the scene of the beautiful legend of the Lady of Falkenstein, and is altogether enchanting. In the collection at Carlton Gardens is a very beautiful little picture of *The Virgin and Child in Glory*, by Murillo, which closely resembles the large picture by the master formerly in the collection of Marshal Soult, which was purchased by Lord Overstone soon after the Soult sale in Paris in 1852, from the family. This magnificent picture, the history of which is extremely interesting, is at Lockinge House, having been presented by Lord Overstone to his son-in-law and daughter. It has often been spoken of as *La Vierge Coupée*, because for many years it hung in the Soult Gallery, with the figure of the Virgin and Child by another hand, the original having been cut out of the picture and stolen when it was the altar-piece of a church in Seville—it was said by the sword of an officer. The most interesting point in the history of the picture in connection with the Overstone collection is that the original Virgin and Child cut out from the great work had been for many years in the possession of Lord Overstone, who bought it from Mr. Gray, of Haringhay, a well-known amateur; but it had never been supposed that it belonged to the large picture. It happened that one day Lord Overstone, walking in Pall Mall, met the late Mr. Senior, who immediately told him that there was a young French painter sent over to England in the hope of discovering a picture by Murillo which was supposed to have come to this country, and made the request that he might be allowed to see the pictures at Carlton Gardens. It was, of course, arranged that he should see them, and when he did he recognised the bust figure of the Virgin and Child as belonging to the picture in the Soult collection. His offers to purchase were of course fruitless; but the discovery was made, and Lord Overstone naturally determined to obtain the *Vierge Coupée*, in which he succeeded some time afterwards, through the negotiation of the late Sir Charles Eastlake; and the fine work was thus, after so many years of deprivation, restored to its original state by the skilful aid of that expert artist, the late Signor Pinti. At Lockinge House there are besides many good pictures of the modern English School, one of the greatest works of Stanfield, *The Castle of Ischia*; and a large sea piece by old Crome—*Yarmouth*. Here also, which is the residence of Sir Robert Loyd-Lindsay, are two fine examples of Bonifazio, a remarkable Bassano, a large Cuyt, and a most beautiful work of Lorenzo di Credi, *A Coronation of the Virgin*. The last-named has an interest beyond its own, as it was the favourite picture of Mr. Rogers, the banker-poet, and always stood at the foot of his bed. It was an equal favourite with Lord Overstone, who bought it at the sale of Mr. Rogers's pictures, and placed it on an easel in his own study at Lockinge House. It will be remembered in the first Exhibition of Old Masters at Burlington House in 1870. At Overstone Park there are several very fine pictures of the English school, of which the most remarkable are a large Italian landscape by Richard Wilson; *The Siege of Gibraltar*, by Wright, of Derby; *Titania Sleeping*, by Stothard; *Edinburgh from the Castle*, by David Roberts. There is also a marvellous little work by Memling—*The Saviour Enthroned*.

The Rev. A. Roberts in a sermon lately preached at Windsor described some of the houses for the working-classes in the town as pigstyes; but on a challenge by the Mayor it was found that the residents made no complaint, and expressed themselves as being quite satisfied with the dwellings.



## GLOUCESTER CATHEDRAL.

A LECTURE in continuation of one delivered a year ago was delivered lately by Mr. E. A. Freeman, in the Chapter House of Gloucester. The subject was the history of the abbey and cathedral. According to the report in the *Gloucestershire Chronicle*, Mr. Freeman said that early in the thirteenth century the nave of the church was covered with a stone vault. During the twelfth century the entries dealt largely with the endless fires which vexed church and city. Like most other Christian churches, Gloucester had its story of the Christian child tortured to death by the Jews. Taking the story as it stood, there really seemed very little evidence to bring the crime home to the Jews, beyond the assumption that none but the Jews were likely to do it. Many as were the times that kings held their court at Gloucester, it was only once that the minster of St. Peter beheld the crowning of a king. While the church of Serlo, if Serlo's it all be, was still untouched, before the nave was vaulted, before the east tower was built, or rebuilt, the young Henry III. received the kingly unction within its walls from the hands of the Bishop of Winchester. The two great churches of the Hwicciai land came at that moment into special prominence. The guilty father was buried at Worcester, the as yet innocent son was crowned at Gloucester. The next time a childish Henry received a crown from a Bishop of Winchester it was in another land (at Rheims in 1429), and under circumstances exactly opposite. Six years after the coronation, in 1222, followed the building of the eastern tower, the work of the monk Helias, of Hereford, whose death was recorded in 1237. Two years later came the dedication, at which the chief minister was the bishop of the diocese, Walter, the patriot who, twenty-six years later, stood by Earl Simon on the day of martyrdom at Evesham. Three years later again was made the vault over the nave, the work of the monks' own hands. In 1242 the south-western tower was begun; at some time before 1246 it was finished. Afterwards, in one of the endless fires, several parts of the conventual buildings perished—the great chamber, the cloister, and the little bell-tower. We may conceive that in the middle of the thirteenth century the west front of Gloucester abbey, like those of Chartres, of Amiens, of Canterbury, till a rebuilding in this century, had two unequal towers, of inequality so marked that the northern and more ancient was known as the "little tower." At St. Peter's, owing, we are told, to the prayers of the crowds of people that came together, the damage went no further; the main body of the minster was saved. But the next year the church of Llanthony, near Gloucester, was utterly burned, with its four towers. The building of a new refectory in 1246 followed fast on the building of the southern tower. A new dormitory was begun in 1303, and finished in 1313. Under Abbot Reginald, who sat from 1263 to 1284, we hear nothing of building, but his reign was a memorable one in the history of the abbey. The house of St. Peter was to send forth a new colony of a different kind from its dependent priories on the Welsh border. It marked the development of the English Universities, and the collegiate system with them, that in 1283 "our house at Oxford" was founded by John Gifford. In him the monks of Gloucester found an enlightened benefactor. It did not become them to lag behind in making the most of the advantages which were offered by the growth of learning, and of the opportunities for learning. They had now their own hall—Gloucester Hall, the site of the present Worcester College—as a dwelling for those of their body who were designed to keep up the tradition of Benedictine culture in a new shape. Fourteen years later the new plantation bore fruit. The *Chronicle* records with natural glee how William Brook, a monk of Gloucester, received the degree of doctor in divinity, another monk of the house disputing with him. The Abbot of Gloucester, Genage, was present with a goodly train, and the inceptor was loaded with gifts. Three years later Dr. Brook had the pleasure of admitting his former opponent, Laurence Honson, to the same degree. Abbot Genage, the prelate of lordly presence and worshipful boldness, whom the great Edward deemed the most venerable man in his whole realm, was the giver of many gifts to his church, besides the beginning of the dormitory in his days. But the second great time of building in the minster itself began with his successor, Thokey, in 1306. The first work was the reconstruction of the south aisle of the nave about 1318. It was, as everyone knew, one of the richest examples of work in the ordinary style of the fourteenth century. Professor Willis pointed out the kindred between its windows and those of Merton Chapel. The re-casing of this aisle was the only architectural work of the abbacy of John Thokey; but an event of his day led to great architectural works in the days of his successors. We had seen the church of Gloucester become the burying place of a prince whom England twice rejected without trial; it had now to become the burying place and something more of a prince whom England no less emphatically rejected after trial. Of all strange forms of devotion surely one of the strangest was that which saw a saint and martyr in King Edward II. Yet to that abnormal worship the Abbey of Gloucester owed its present form. He was half inclined to put it the other way, and to make a new count in articles of deposition against the unworthy king that his misguided devotees had cost us the minister of Serlo in its perfect form, and

hindered us from studying the contrast which we should otherwise have been able to mark between its eastern and its western limb. The connection of Abbot Thokey with Edward of Caernarvon began early. In the days of his father the prince visited the abbey. He dined at the Abbot's Hall, which was adorned with pictures of the kings of the English. Was it treasonable imagining of his father's death when he asked whether they would ever have his likeness among his forefathers? The abbot, under a prophetic impulse we were told, answered that he trusted one day to have his in a worthier place than that. When, therefore, he had run through his course of evil, when he had lost his crown by a lawful sentence, and his life by unlawful violence, when the abbots of other monasteries, of Bristol and Kingswood and Malmesbury feared to receive his body, Abbot John, of Gloucester, went to the Castle of Berkeley with a car adorned with the arms of the Church of Gloucester; he bore away the body of the deposed king, and with a solemn procession of monks and citizens buried it on the north side of the high altar of the minster. Soon after this Abbot Thokey resigned his office into the hands of John Wigmore, in whose abbacy of eight years, from 1329 to 1337, great changes began. The *Chronicle* now recorded with delight the many oblations of the faithful at the tomb of the prince from whom the estates of England had taken away the crown that they had given. Abbot Wigmore was a great builder. He built much in his own abbatial house, and also the Grange at Highnam; and now out of the offerings at the tomb of Edward he began a work which altogether changed the character of his church. The eastern part of Serlo's minster still stood untouched save by the carrying up of the mid-tower. Abbot Wigmore began a work which partly rebuilt and partly cased the whole eastern part of it in a new architectural style, of which he or his architect may be fairly called the inventor. Everybody had believed that the first beginnings of the Perpendicular style were to be found in the work of Bishop Edingate at Winchester; but here—as Professor Willis had shown from undoubted evidence—was work not quite fully developed Perpendicular, but so far advanced that it must be called Perpendicular, rather than any other style built between 1329 and 1335. All the essential features of the style were here, that specially English variety of the great Gothic family which, whether for good or evil, effectually distinguished the architecture of our land from that of every other. The south aisle of the nave was one of the most perfect examples of one style; the south transept, so very few years later, was a nearly perfect example of another. The change of taste must have come in with a rush. As marking an epoch in the history of architecture in England, John Wigmore ranked with the Confessor at Westminster, with William of Calais at Durham, with Roger of Caen at Sherborne and Malmesbury, with Hugh of Avelon in the choir of Lincoln. Abbot Wigmore, within six years of his promotion, completed from its foundation the aisle of St. Andrew, that was the south transept as they now saw it. The transformation of the Norman minster had thus begun, and the strange source of income which had enabled the brotherhood to begin it did not fail. The offerings at the tomb of Edward of Caernarvon still went on. They were so plentiful that some said if all had been spent on the fabric the whole church might have been renewed. Happily, this complete renewal was warded off, and in the parts which did put on a new dress at this time renewal did not always go beyond throwing a kind of veil over the elder work. In the days of John Wigmore's successor, Adam of Staunton, abbot from 1337 to 1351, the great vault of the choir was made at a great and costly expense, together with the stalls on the prior's side. Under Thomas Horton, abbot from 1351 to 1377, the work was brought to an end. The high altar, with the presbytery, and the stalls on the abbot's side were begun and finished. He also made the images and tabernacle work at the entrance of the north side; and in 1374 he finished St. Paul's aisle, that is to say, the north transept. The cost of his work was 781*l.* *os.* *2d.*, of which the abbot himself paid 444*l.* and the odd *2d.* He also began the cloister, which was finished by his successor, Walter of Frocester, abbot from 1381 to 1412. To him they owed the compiling of the *Chronicle*, which they had been following. It was continued into his own abbacy, but it ended before his death. But the transformation of the church was not yet done with, even so far as it was actually carried out. We had now mainly to trust to tradition as handed down by Leland. Abbot John Morwent, who sat from 1420 to 1437, undertook to bring the nave into harmony with the new forms which had been given to the choir and transepts. He began at the west end, where it was plain he pulled down the towers, as was done at Winchester and St. Albans. He could conceive no motive for their destruction, except a wish to give greater importance to a central tower, built or to be built; and in this case it must have been a tower to be built, or to be re-cast, whether the earlier tower was left standing for a season or not. At his hands the western limb of the church put on its present style. Thomas Seabrook, abbot from 1450 to 1457, began—it did not appear who finished—the central tower, the actual architect being one of the monks, named Robert Tully. The next abbacy, that of Richard Henley, lasted from 1457 to 1472, and in his day the Lady Chapel was at least begun. Outside hardly any signs of the elder work were allowed to appear. The whole, though spread over so long a space of time, was done



from one general design. The church was to be recast rather than rebuilt. The only part which had at all the character of an altogether new building was no part of the essential limbs, but the eastern Lady Chapel. Mr. Freeman compared the changes which had been carried out in various other cathedrals with those in Gloucester, and explained in detail the changes effected in overlaying the Norman work with Perpendicular work. Adam of Staunton was possessed beyond others with the English taste for a single gigantic east window, and he explained how this had been carried out. The Norman triforium was still in being, but it was veiled; but at Norwich it was in no way veiled. He reverted to the explanations given by Professor Willis in 1860, and observed that the Gloucester Perpendicular style, both of the fourteenth and fifteenth century, had a character of its own, which was shared by some other buildings in the same part of England, which may well have followed its model, such as the towers of Worcester Cathedral and Malvern Priory. He described the peculiar features of the style, and contrasted it with the Perpendicular of other parts of the country. The Gloucester builders, when they had once started their new style, went on using it, but the rest of England did not adopt it until later. With regard to the vaulting roof, Professor Willis had enlarged scientifically on the construction of the vaults of this period. Mr. Freeman proceeded to refer to the beautiful fan tracery of the cloisters, and to many other features in the cathedral buildings, and the points of contrast with other cathedrals which they afford, to detail which our space fails. For good or for evil, Gloucester Abbey was, in style, plan, and outline, one of the most English of English churches.

### THE VICTOR EMANUEL MONUMENT.

A DESIGN has been prepared by Professor Giulio Monteverde for the proposed tomb of King Victor Emanuel, which is to be erected in the Pantheon. The design is commonplace, and is better adapted for erection on a battlefield than in a temple like the Pantheon. The *Italian Times* gives the following description of the scheme; but what is called an urn is an adaptation of an Etruscan sarcophagus with a sloping roof:—

The ground-plan is a square of ten mètres, with small square projections at the four corners. A massive pedestal supports six steps, upon which two plinths rest, bearing the funeral urn. The higher edge of this urn, which is of a very primitive form, is eight mètres in height from the ground. The urn is adorned by the traditional cushion bearing the regal crown. At the corners are eagles, and in the centre the monogram of Victor Emanuel enclosed in a wreath of oak leaves. Four lions are seen crouching on the projections. Round the pedestal, which is richly adorned in the ancient Roman style, runs a band bearing the arms of the hundred towns of Italy.

Taken by itself, this design for the tomb of the first king of united Italy is grandiose; but this alone is not enough. We should consider whether this monument will harmonise with the building in which it is to be placed. The Pantheon was built when Roman architecture had attained its apogee, and it is the grandest monument bequeathed to us by those great builders of old. We must, therefore, be careful in adding any monument which may impair the glorious harmony of the great temple. We must say, frankly, that the design, as presented, does not to our mind fulfil all the requisites desired. Covered sarcophagi were only used in the primitive periods of Etruscan art, and in the decadence of the Middle Ages. We cannot, then, admit that such a monument can harmonise with the grand lines of the greatest of Rome's temples. No less can the petty shields with their crests and monograms, or the four lions of this monument, be considered as fitting the place. Archæology teaches us that the great builders of old always avoided breaking the interior lines of their buildings with erections in their centre. Whenever they were compelled to provide a place for a statue or altar, they elected to make an underground shrine. The temple of Vesta in Rome affords us a splendid example of this, as the place for the altar is excavated in the centre of this round temple.

Modern builders have also found that erections in the centre damage some buildings, and it is on this account that the porphyry urn containing the mortal remains of Napoleon I. has been placed in the centre of the crypt under the cupola of the Invalides in Paris. In our basilicas the Christian builders have tried to keep this æsthetic law in view, but have deformed most of these buildings by raising those bronze or marble canopies which we so often find to cut the lines of the architecture and hide the mosaics of the apsis. The Pantheon has hitherto been spared such treatment.

The canopy in this church, being close to the largest of the niches, does not injure the symmetry of the architecture. But now that a tomb of 18 mètres in height and 10 mètres in breadth is to be raised in the centre of the Pantheon, the inimitable beauty of this temple must certainly be lessened somewhat, as the chief niche is 9 mètres wide, and the chapels in the interior, as well as the entrance, are only 8 mètres high. And in this case, why should this renowned monument have been isolated, and why should

the belfries, built by Bernini, have been dismantled, if now we are to hide the beauties of the interior? Archæologists in future ages might think that Pope Urban VIII. had come to life again.

Everyone remembers the bad effect made by the temporary tomb which heretofore has been erected every year according to the design of Commendatore Rosso, and for the funeral ceremony in honour of the late king. To think, now, that the monument designed by Commendatore Monteverde should look more in keeping with the Pantheon is a vague belief. There is nothing, however beautiful it may be, that would make any worthy effect in this edifice built by Agrippa. When Michael Angelo was summoned by Julius II. to repair the *Torso of the Belvedere* he refused, saying that it would be impossible for anyone to touch it. We should have wished that a celebrated modern artist had answered the Honourable Guido Baccelli in the same terms.

Moreover, the tomb of Victor Emanuel, being placed in the middle of the Pantheon, would constantly be injured by the rain. We are told that this might be remedied by closing the large opening in the roof of the Pantheon by which air and light penetrate into the interior, but they do not consider that by thus closing these apertures the durability of the monument would be lessened. In that immense dome, deprived of air, damp might do great harm. After what we have said, the idea suggests itself that the tomb of Victor Emanuel might be placed where the high altar now stands. There no incumbrance would be possible, and there no fear could exist of damage by rain or by the flooding of the Tiber. There it would be seen by all who enter the church.

### THE CONNECTION BETWEEN THE FINE ARTS.

A LECTURE was delivered on this subject at Glasgow on last Sunday evening by Mr. Ford Madox Brown. The lecturer said that in choosing such a subject he did not wish to go into the matter philosophically, but rather to call attention to the undeniable evidence which they saw around them as lovers of art, as patrons of art, and in a sense as masters of art, of the importance of considering the arts in their various aspects generally, rather than investigating, as was more usual, one particular point. The fine arts were usually limited to four—poetry, music, painting, and architecture. The French Academy, it was true, admitted a fifth—dancing; but that evening he would omit the consideration of the latter branch. In its place, however, he would substitute another which was more indigenous to us—decorative art. For the purposes of illustration he must widen the definition of poetry so as to include all imaginative literature, for poetry, whether got up in feet, or verse, or stanzas, or merely uttered with the subtle cadence which they found in Carlyle's "French Revolution" or Walt Whitman's "Drum Taps," was still poetry, whatsoever its mere form. Science asked, "Why not join hands, you shall be as ourselves?" They could not join hands, however, but say with the French, "Art for itself." Art was a reflection of the universe. Whatever was beautiful in the universe, whatever was terrible, whatever was sad, found its expression in art. But in saying that art had hitherto stood alone, he did not wish in this age of science to be understood too literally. Art was to a certain extent indebted to science in connection with the study of anatomy in sculpture, harmony in music, and chemistry and perspective in painting and architecture; but still art would continue to flourish in the absence of all these. Speaking of the aids to the study and interpretation of the arts, he mentioned that he had lately visited Paris for the purpose of purchasing a set of the best-known casts of ancient sculpture for the Manchester Museum, and as the set only cost 500*l.*, he thought that no important city ought to be without one. The art student in England had many opportunities for study afforded him in the national collections, and the autotype process brought within his reach examples of Continental treasures showing most truthfully the touches of the great masters themselves. In music much progress had been made within recent years in this country, and Mr. Mackenzie's "Colomba" was an admirable example of the new school. Musical festivals in all the large centres were now given, at which the works of the greatest composers were performed to perfection. While in Amsterdam lately he was surprised to hear Wagner's music played on a street organ—a great improvement upon what was usually discoursed in this country upon these instruments, and even by such means anyone might be struck with the beauty of a composition, and led to seek to know it better. He then alluded at some length to what translators had done to admit of the classics, and the works of the most noted authors of all countries being studied in English. While in olden times every school of art had its distinctive features, in modern times all the poets and painters agreed in rendering the ideal in a scrupulously truthful manner. In music there were precisely identical ideas, and, in short, there was no divergence now between the arts of any country. The leading poets of England, France, and Germany, and the greatest painters and sculptors seemed, without exception, to have identical aims, only varying in degrees of power to carry them out.



## NOTES AND COMMENTS.

THE International Health Exhibition, which is to be held next year, will, it is to be hoped, be as successful as the "Fisheries." In the third, fourth, and fifth groups will be comprised all that pertains to the healthful construction and fitting of the dwelling, the school, and the workshop, not only as respects the needful arrangements for sanitation, but also the fittings and furniture generally in their effect on the health of the inmates. The most improved methods of school construction will be shown, and the modes of combating and preventing the evils of unhealthy trades, occupations, and processes of manufacture will form portions of the exhibition. The sixth group will comprise all that relates to primary, technical, and art education, and will include designs and models for school buildings; apparatus and appliances for teaching; diagrams, text-books, &c. Special attention will be directed to technical and art education, to the results of industrial teaching, and to the introduction of manual and handicraft work into schools. The objects that are included in the groups embrace nearly everything connected with the builder's art. But is it not an omission that with such a programme there is no architect's name on the Council?

It was announced lately that those records of the Stratford-on-Avon Corporation which relate to SHAKESPEARE and his times were to be autotyped under the direction of the well-known Shakesperian scholar, Dr. HALLIWELL PHILLIPPS. But unfortunately a difficulty has arisen, and as it is more or less a personal one, it may be a bar to the work. At first it was arranged that there was to be a sub-committee of three members to represent the Corporation, but afterwards it was converted into a larger one, which might be called a committee of the whole council. As was to be expected, obstacles were then raised, and from the restrictions that were put on his actions, it would appear that Dr. HALLIWELL PHILLIPPS was conspiring to destroy or to mislay the documents instead of reproducing them. It was proposed by the Corporation that the negatives should be taken in a room which was so dimly lighted that photography was impossible. Dr. HALLIWELL PHILLIPPS' practice has been to superintend the operations and to remove the documents one at a time, and in Stratford-on-Avon there is no man to whom the records are so precious. But the Corporation insist on standing on their rights as owners of the property, and will allow nothing to be done unless on conditions which are impracticable.

A TOWN SURVEYOR might reasonably expect that when there is an architect on the council he would be assured of fair play. In Leicester, however, Mr. MILLICAN, an architect and town councillor, has opposed the surveyor on apparently very trivial grounds. The charges were threefold. First, that the borough surveyor had advised on or superintended to some extent some private drainage in the parish of Knighton; second, that he had also advised on or superintended drainage in the parish of Evington, and also on some work in the parish of Ratcliffe-on-the-Wreake; and thirdly, that he had been engaged on the arrangement or supervision of drainage of a rather complex and extensive nature for the parish of Barrow-on-Soar. The discussion of the charges occupied a day—or rather so many friends of the surveyor spoke that the subject occupied nearly the whole time of the meeting. Judging from the report, Mr. MILLICAN at one time nearly forgot what was due to his professional dignity. One of the illegal works undertaken by the surveyor was a visit to the mayor's private house, which lasted three-quarters of an hour; another was a visit to a college; in the third the surveyor was consulted by a neighbouring township in which Leicester has an interest. The value attached to the charges will be judged from the division list—they were rejected by a large majority.

ARTISTS and students of the history of costume will do well to secure a copy of the letter on the architecture and costume of the new play "Claudian" which has been addressed to Mr. WILSON BARRETT by Mr. E. W. GODWIN, F.S.A. The period of the play—A.D. 360–460—was one of transition, and is not often represented on the stage or in pictures. There must have been difficulty in finding authorities for the various costumes designed by Mr. GODWIN. His description is clear

and complete, and shows the author's mastery of the subject. The obelisks, statues, and mosaics of the period have been turned to account, and, with his customary attention to details, Mr. GODWIN says he has gone to the objects in museum cases for weapons, personal ornaments, &c. A play which has been so skilfully superintended, and which affords opportunity for scenery and gorgeous dresses, should be as successful as the everyday scenes lately seen on the Princess's stage.

At a time when so much attention is given to the subject of labourers' dwellings, it may be well to inform the public that an exhaustive report on the condition of the St. Martin's district was prepared some years ago by Mr. C. F. HAYWARD, F.S.A. It is needless to say that in that district there are a great many squalid houses, which gave an opportunity to Mr. HAYWARD to investigate the most difficult conditions of one of the most important of social problems. He has entered fully into questions of finance, and has given abundant statistics to illustrate his conclusions. It would be a great advantage if his pamphlet were reprinted now.

SOME information respecting the wire used for electrical conductors was given by Mr. W. H. PREECE at the Institution of Civil Engineers on Tuesday last. Copper is almost universally used for insulated conductors, and the manufacture has been so much improved that it is now twice as good as it was in 1856. Copper wire has a breaking strain of 28 tons per square inch, while iron wire breaks with 22 tons. The best copper comes from Japan, Chili, Australia, and Lake Superior, but a great deal of pure copper is obtainable by electro-deposition. The ordinary best puddled iron is at present used only for fencing purposes, but a mild English Bessemer steel is largely used for railway telegraphs and for stays, although the resistance is very high, owing to the presence of manganese. The wire used by the Post Office is made from Swedish charcoal-iron. Swedish Bessemer, or a specially-prepared low carbon English Bessemer, is adopted by the Indian Government. Cast-steel wire, with a breaking-weight of about 80 tons to the square inch, has been adopted on the Continent for telephone currents; while in England, where speed of working is the prime consideration, electricians are satisfied with a breaking-strain of 22 tons on the square inch. In the colonies, where long spans are essential, and speed of working is not so important, the specification is 30 tons on the square inch.

WHEN RIP VAN WINKLE arose from his long sleep, he soon recognised that the world was changed. But occasionally we find men emerging from obscurity who believe that every thing has remained stationary. The "Aged Artist" who wrote to the *Times* a day or two ago, is evidently of that class. He saw some of the drawings in the early schools of design, and he is convinced that they came from South Kensington quite lately. At the end of a term a student, he says, brings home to his expectant parents "a few mechanical lines, hard and stiff as a wire, as all the result of the time and expense." His recommendation is "that a number of common bricks be shot down *pêle môle* on the ground for the student to copy." But unless we are mistaken, bricks contain only hard rigid lines, and it would be difficult to find one that is a model of a curve. The schools of the Science and Art Department may have their shortcomings, but they are entitled to justice; and it ought to be generally known that for a generation at least they have had a better style of drawing than that described by the "Aged Artist."

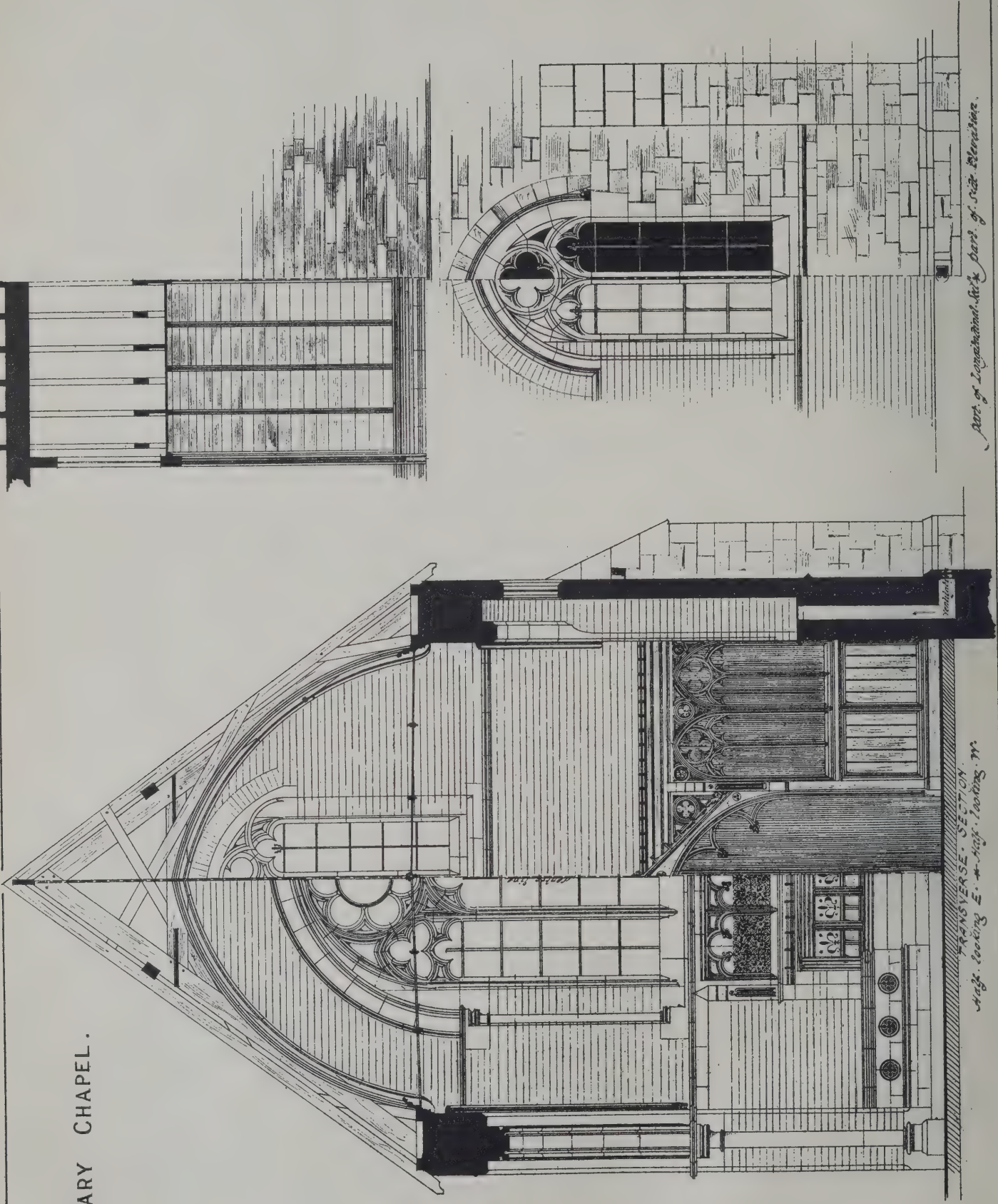
A CASE has been tried in the Clerkenwell County Court which illustrates the law in regard to hoardings. A cab was injured by coming into collision with a hoarding around the Victoria Chambers, Chancery Lane, and the owner claimed damages. For the defence the Act of 57 Geo. 3, cap. 29, was first relied on. It enacts that no one is to set up posts, bars, rails, or any enclosure without having a license and sanction from the surveyor of the district. But the judge appeared to be of opinion that the log of wood which is generally placed outside a hoarding, and was the cause of the collision, was unnecessary. Then it was argued that the builder was not responsible, as the hoarding had been let to Messrs. WILLING & Co., who also obtained the license for the alteration of the pavement. There could be no defence to this plea, and a verdict was recorded for the defendant, with costs.







MORTUARY CHAPEL.



Arch. of Longwood and St. Peter's, St. Peter's, St. Peter's.

TRANSVERSE SECTION.  
Half-Section E. - High. Interior.

Spangue & Co. 22, Market Lane, Cannon St. EC.

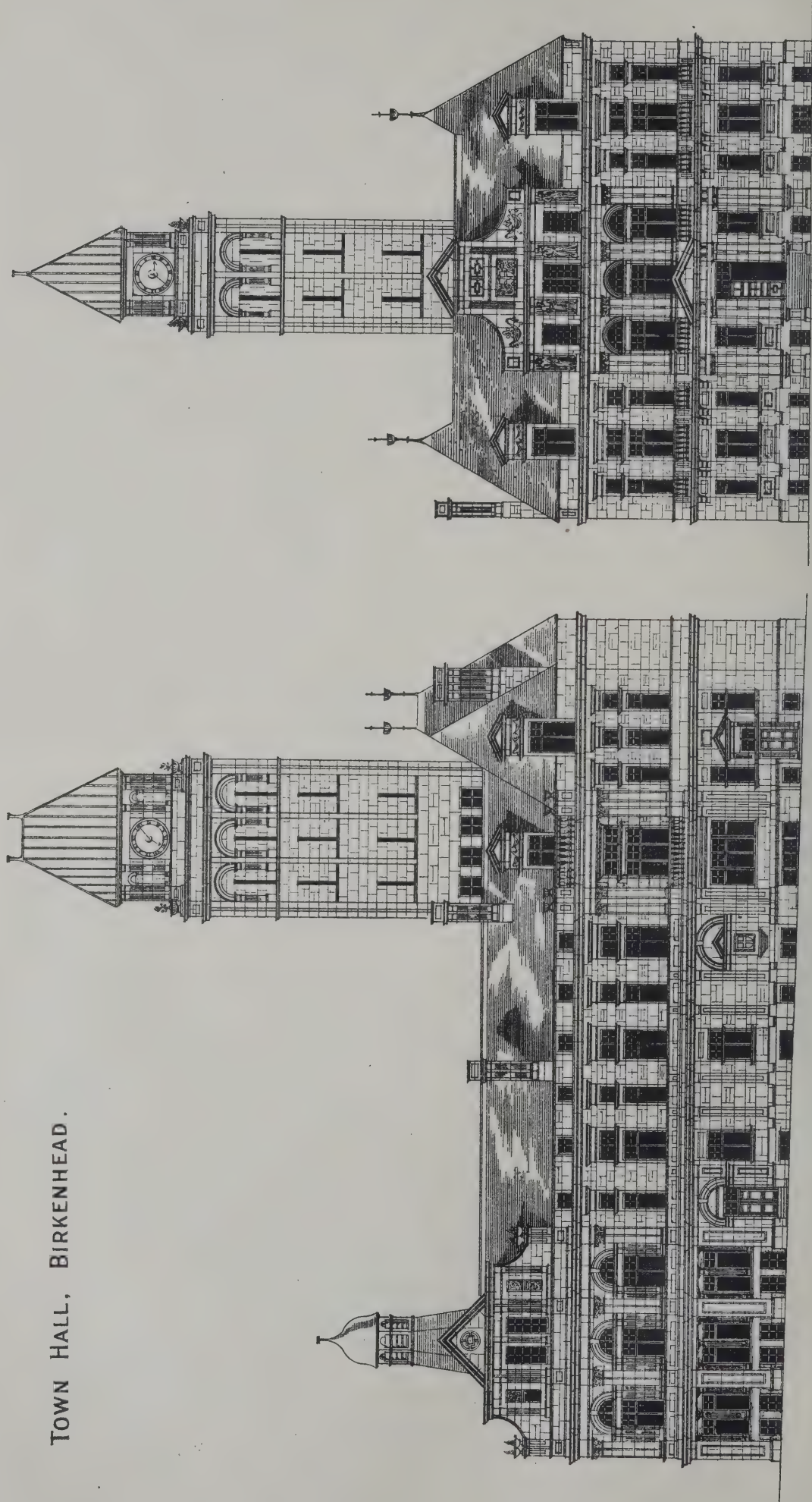
DESIGN BY THE LATE RICHARD C. PAGE, A.R.I.B.A.







TOWN HALL, BIRKENHEAD.



NORTH ELEVATION.

WEST ELEVATION.

DESIGN BY THE LATE RICHARD C. PAGE, A.R.I.B.A.

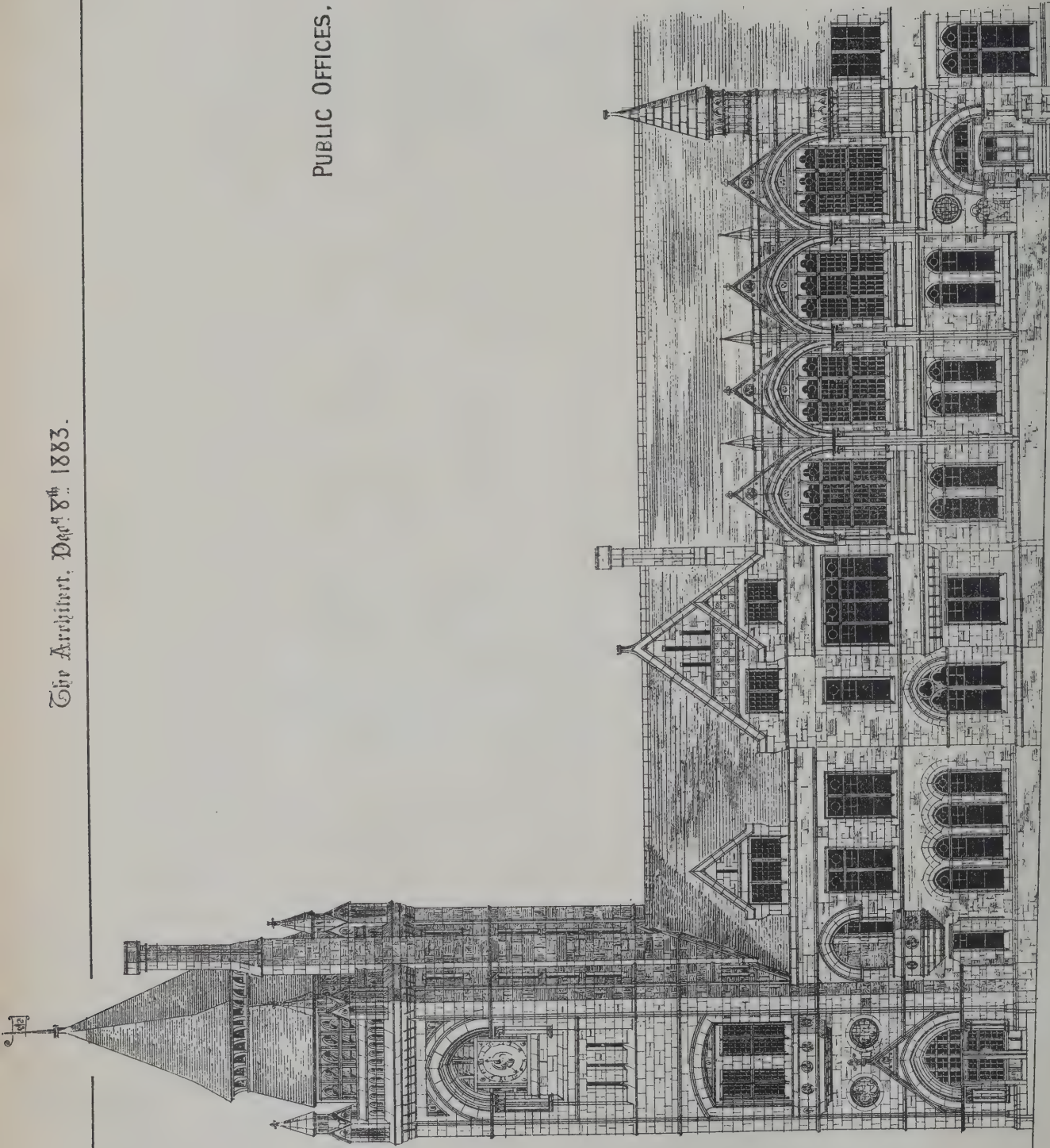






For Architect, Dec<sup>r</sup> 8<sup>th</sup> 1883.

PUBLIC OFFICES, ASTON.



BOARD SCHOOL, PRESTON ST., HALIFAX.









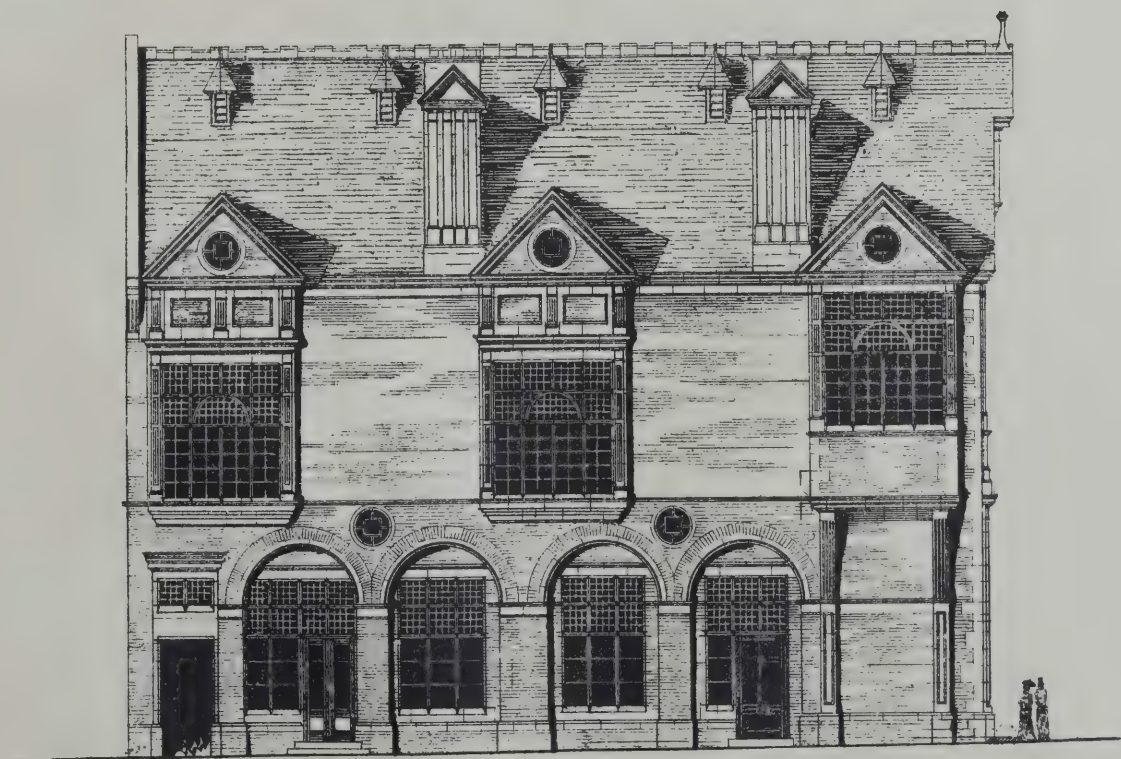




TOWN HALL, PONTEFRACT.



FRONT ELEVATION.



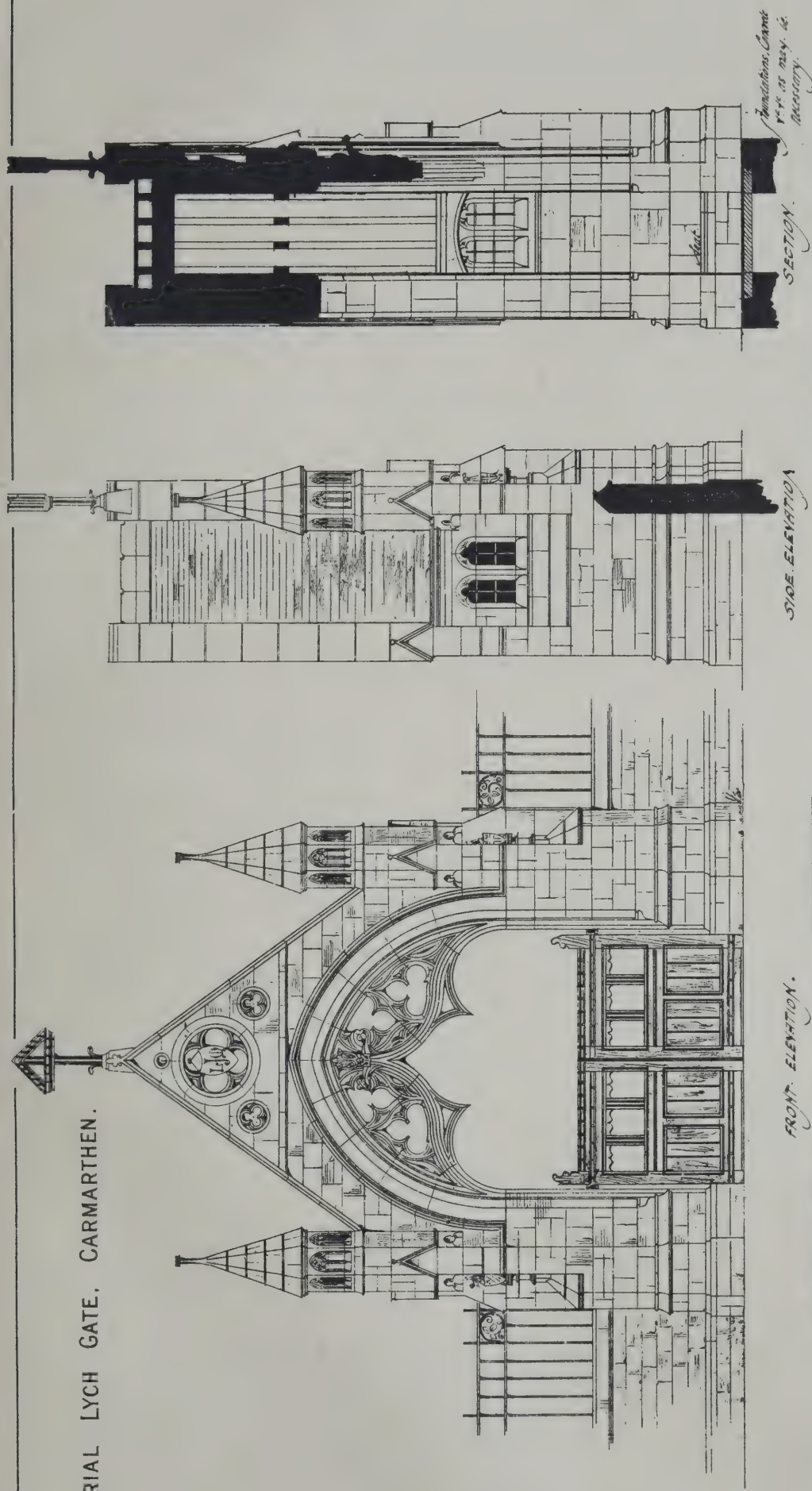
SIDE ELEVATION.







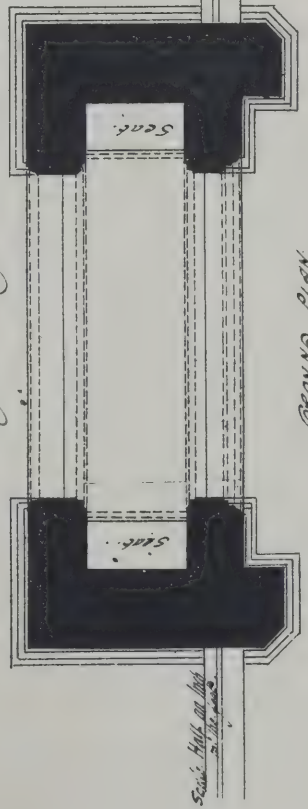
MEMORIAL Lych Gate, Carmarthen.



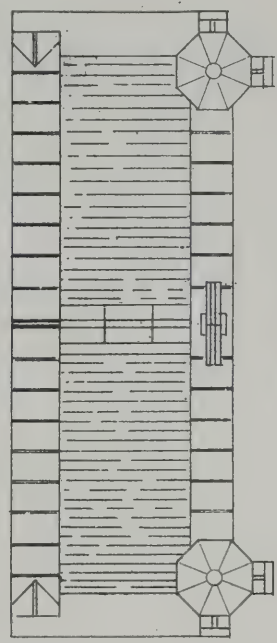
FRONT ELEVATION.

SIDE ELEVATION

SECTION.



GROUND PLAN.



ROOF PLAN.

DESIGN BY THE LATE RICHARD C. PAGE, A.R.I.B.A.

Sprague & Co. 22, Mark Lane, London, E.C.







## ILLUSTRATIONS.

DESIGNS BY THE LATE RICHARD C. PAGE.

THE illustrations in *The Architect* for this week will have a melancholy interest for many a young architect. Mr. RICHARD CHARLES PAGE, who died in a public infirmary about three months ago, might well be called a "representative man" by the junior members of the profession. He was a laborious student; he was zealous in the affairs of the Association; he was an able assistant, and of his honour, industry, and practical knowledge there could be no doubt. RICHARD PAGE had all the qualifications that are supposed to insure a successful career, but although he had passed his thirtieth year success never crowned his exertions. When one knows of what he was capable, it is sad to think that there were no commissions for so able a man, and that his friends will have to point to the designs now published when they refer to his powers. Under those circumstances the illustrations might be considered to be outside criticism, but they will sustain examination. In judging them, we should remember that Mr. PAGE was careful in adhering to the conditions that were stipulated, although it would have been easy for him to produce designs which were more showy and imaginative. As his friend, Mr. COLE ADAMS, said of him, "He fell short of his aims because of his integrity and truthfulness, which would not allow him to design a building which might be more attractive, but which would be contrary to the advertised requirements." Mr. PAGE was a sincere admirer of the late Mr. STREET, and from him, more than from any other architect of our time, he appears to have drawn inspiration.

## ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE third ordinary meeting of the Institute was held on Monday evening, Mr. D. Brandon, F.S.A., vice-president, in the chair.

The CHAIRMAN stated that Mr. Horace Jones, president, was unable to attend through indisposition.

The business set down for the evening was the resumption of the subject brought before the Institute by Mr. E. C. Robins, F.S.A., at the previous meeting on November 19, and adjourned, on the motion of Mr. T. Roger Smith, to the present evening. Mr. Roger Smith was also an absentee by reason of indisposition. The attendance was scanty in the extreme.

## Fittings of Buildings for Applied Science Instruction.

Mr. E. C. ROBINS, F.S.A., began by drawing attention to the loss that the scientific world had sustained in the death of Sir William Siemens, who had taken part in the first lecture on this subject, and had intended doing so in the second; but on the very night the paper had been read he died. Mr. Robins then began to describe the fittings of mechanical laboratories as follows under the heads of fittings, for—1, lecture-room; 2, general laboratory; 3, special laboratory and testing-room; 4, engine-room; 5, workshops; 6, melting-room and smithy; 7, drawing-office; 8, museum. Under the first head Mr. Robins pointed out that the system of teaching mechanics had not hitherto been developed to the same extent as physics and chemistry, but that Professor Perry at Finsbury College had endeavoured to elaborate a system through which all pupils of the college might pass. The Central Institution, South Kensington, would in all probability furnish a fine example when completed, as it had been taken in hand by Sir Frederick Bramwell. A separate lecture-room was required for mechanics, which should also be used as a laboratory and drawing-room, every alternate row of benches being supplied with movable tables, thus leaving passages between the others for the draughtsmen; grooves and recesses for colours, &c., should also be provided in the tables. In reference to black boards, Mr. Robins spoke of a board devised by Professor Thomson of Glasgow, and so arranged that by the aid of levers the lecturer could move it with the greatest ease, and without having to stop writing on the board while moving it. In all mechanical laboratories both floor and walls, as also the ceilings, should have beams let in to which apparatus of various kinds could be secured. In the general laboratory all students in the college should find some work prepared for them. In the past this laboratory had been more of a private laboratory, where the professor, assisted by one or two of the senior students, had conducted his experiments. Mr. Robins then specified the dimensions most suitable for a general laboratory, and two smaller and subsidiary rooms, which should also be provided. In the special laboratory should be the testing machines of various kinds for materials such as iron, steel, cement, oils, fuels, &c. There should also be arrangements for testing the efficiency of hydraulic, steam, and transmission machines, for researches in hydraulics, the

resistance of ships, &c. As the special laboratory might be required for some one or more of these purposes, it was obvious that the architect must consult with the professor who would have charge of the laboratory, to become cognisant of the special requirements of the case. The engine-room should have a high pressure and conducting engine, with expansion valve, controlled by a good governor, and the pipes to the evaporation conductor in the roof should be placed internally, and secured from the effects of changes in the weather. The shafting should pass through all the rooms, especially through the workshops. The workshops would be for learning the use of tools and machines in iron, steel, and wood. The iron workshops, wood workshops, &c., should be altogether distinct. Store-rooms must be provided in connection with the workshops. The melting-room should have a smithy and a brass furnace and moulding trough. A good drawing-office was indispensable. For every twenty students 1,600 square feet—80 square feet to a student—should be allotted. The lighting should be good, and the light should come in at the left front of the student. A black board might also be provided for this room. A museum for apparatus, models, and specimens of tested materials, &c., &c., was most desirable. Mr. Robins next took up the question of heating and ventilation proper to applied science schools, and spoke in favour of the use of fans for blowing in and for drawing out the air, since it was necessary to preserve a constant movement in the shafts by which the vitiated air was extracted, and this movement in the draught-places must not be less than 5 feet per second. The system of ventilation carried out by Mr. Robins at the Society of Arts had by its success justified the expectations formed as to its efficiency, and for it Mr. Robins had received a vote of thanks from the Society. The ventilation of these schools had to deal not only with getting rid of vitiated air arising from many people being collected together, but the fumes and noxious vapours resulting from the experiments carried out in these buildings had also to be dealt with. The heating and ventilating arrangements Mr. Robins then described in considerable detail, as carried out or in progress at Finsbury College, the Central Institution, the Yorkshire College, Leeds, the Merchant Venturers' School, Bristol, the meeting-room of the Institution of Civil Engineers, &c.

Professor ARMSTRONG, who made use of the plans on the walls to illustrate his remarks, described some recent experiments made in regard of ventilation, the results of which had been tabulated and hung on the wall of the room. He also described the satisfactory working of a small fan driven by an electric motor, and his remarks tended to show that a greater velocity could be imparted by a fan to the air in the shafts than by other means, for experiments had been made to utilise the waste heat of furnaces, and other expedients, with no practical results, and the only thing that had been found sensibly to raise the velocity was lighting a ring gas burner which had been arranged within the outer shaft.

Mr. PHIPPS then made some remarks, and in the course of them referred to the ventilation of the Bute Hall, Glasgow, the new schools at Edinburgh, &c. He was unable to speak of the performance of the system at the Bute Hall, as the opening of the building had been postponed, but the principle was to insure a current of air from outside as a means of ventilating public halls and places of assembly. Air on being propelled into a room must necessarily find its way out—a matter of no difficulty in assembly-halls, where doors were constantly being opened, &c. Independent outlets, however, existed, which allowed the air to escape when the doors and other means of outlet were closed.

Professor PERRY remarked that a statement of the velocity with which air passed through a certain orifice gave no information of the amount of draught, as the velocity would be greater or less according to the size of the orifice. Various velocities had been mentioned without allusion being made to the size of the orifices through which the air passed. Mr. Perry then referred to calculations made by Professor Ayrton and himself, which demonstrated the superiority of ventilation by means of fans. The ventilation of the future he believed would be by machine-driven fans, and he hoped that Professor Armstrong's experiment with a fan and a small electric motor would lead people, especially architects, to look into the system at Finsbury College, where they could judge of its advantages. The laboratory of the past, as Mr. Robins had said, was a private room where the professor, very often unassisted by any student at all, had worked out his experiments and published his results, valuable results, and all very well in their way; but it was impossible to help seeing that a great change had come over not only the teaching of chemistry but of physics and mechanics; and architects, like other people, must keep their minds open in view of these studies becoming a matter of necessity in every college. Architects would have to make their arrangements accordingly, as the small space hitherto allowed for the laboratory would be no longer tolerated. Mr. Perry then described the black board constructed by Professor James Thomson of Glasgow. It was necessary that the lecturer should not rub out a single line of a mathematical formula. A long board was therefore required, and one that would move with a touch of the finger, or of the chalk. All this Mr. Thomson's arrangement enabled one to do. The common mechanism used—two chains and a heavy balance weight—could only be set in



motion with difficulty, owing to the friction of the parts. Architects might find Mr. Thomson's principle to be of use to them in circumstances where heavy objects had to be hung.

Mr. H. MCLACHLAN, the holder of the Godwin Bursary, then read a short paper describing some technical German buildings.

The thanks of the meeting were then awarded to Mr. Robins, who replied, and the meeting was adjourned.

### A ROYAL PICTURE.

A PICTURE recently acquired from the Strawberry Hill collection for the Queen was exhibited at last week's meeting of the Society of Antiquaries by Mr. J. C. Robinson, F.S.A., surveyor of the Queen's pictures. In a paper by Mr. Robinson, which the secretary, Mr. Knight Watson, read, Horace Walpole's account of the picture was quoted. The picture is that of an English king and queen and several members of their family represented at prayer under tents. Over their heads is a representation of the combat of St. George and the Dragon. Walpole, though of opinion that the picture was painted in Henry VII.'s time, took it to be meant for Henry V. and his brothers, Henry's queen, her sisters, and two other ladies, whom it was difficult to identify. The portraits were said to be imaginary. Mr. Robinson does not quite agree with Walpole that the faces were imaginary. He thinks there is individuality in them, although they bear signs of having been coarsely repainted. He perceived in the picture a marked Flemish influence, and is inclined to think it the work of an excellent Flemish painter of the school or following of the Van Eycks. Probably it was executed about 1500. Mr. G. Scharf also read a paper on this picture, which he said had once been purchased for 6*l*. When it passed into Walpole's hands it cost him 38*l*., and he had written that "the price of antiquities had so risen that he had expected to have paid more." It was, in Mr. Scharf's opinion, clearly a picture of Henry VII., his consort, and his children. It was curious that Walpole had failed to discover this, although he had assigned the date of the picture to Henry VII.'s reign. In its original state the picture had been a most elaborate and refined specimen of Flemish art. The exquisite finish of the painting of the goldsmith's work in the picture, and the subtlety exhibited in the folds of the drapery, showed a close affinity to the works of Gossaert and Mabuse; but from its date Mabuse could not possibly have painted this picture.

### DUNFERMLINE FINE ART EXHIBITION.

THE first exhibition of the Fine Art Association of Dunfermline was formally opened by the Earl of Elgin on Saturday afternoon. There was a large attendance. Lord Elgin, in declaring the exhibition open, said that art exhibitions were of modern creation. In days of old the fine arts depended very much on the patronage of great men of the earth—on the rich and powerful. That patronage was still extended to artists and men of genius in this country and throughout the world. But he could not forget that one of the greatest ages of art in the history of the world was that of Athenian art, and that under the auspices of the Athenian democracy those great Grecian sculptures were created, some of which were now preserved to the country. But the object of exhibitions such as theirs, and of the Science and Art Department of South Kensington, was to diffuse throughout the community a love of all that was comprehended under the name of art. No one could come and see that exhibition without surely carrying away with him something of the feeling of the beauty and harmony of order—of a sense of the pleasantness of quiet, and the violence of contention and strife; and he would be a great deal the better when he left the room than when he entered it.

### THE NEW EDDYSTONE LIGHTHOUSE.

AT the ordinary meeting of the Institution of Civil Engineers on November 27, a paper on "The New Eddystone Lighthouse" was read by Mr. William Tregarthen Douglass, C.E.

The necessity for the construction of a new lighthouse on the Eddystone rocks had arisen in consequence of the faulty state of the gneiss rock on which Smeaton's tower was erected, and the frequent eclipsing of the light by heavy seas during stormy weather. The latter defect was of little importance for many years after the erection of Smeaton's lighthouse, when individuality had not been given to coast-lights; but with the numerous coast and ship-lights now visible on the seas surrounding this country, a reliable distinctive character for every coast-light had become a necessity. The tower of the New Eddystone was a concave elliptic frustum, with a diameter of 37 feet at the bottom, standing on a cylindrical base 44 feet in diameter, and 22 feet high, the upper surface forming a landing platform 2 feet 6 inches above high water. The cylindrical base prevented in a great measure the rise of heavy seas to the upper part of the tower, and had the

further advantage of affording a convenient landing-platform, thus adding considerably to the opportunities of relieving the lighthouse. With the exception of the space occupied by the fresh-water tanks, the tower was solid for 25 feet 6 inches above high-water spring-tides. At the top of the solid portion the wall was 8 feet 6 inches thick, diminishing to 2 feet 3 inches in the thinnest part of the service-room. All the stones were dovetailed both horizontally and vertically, as at the Wolf Rock Lighthouse. Each stone of the foundation-courses was sunk to a depth of not less than 1 foot below the surface of the surrounding rock, and was further secured by two Muntz metal bolts  $1\frac{1}{2}$  inch in diameter, passing through the stone and 9 inches into the rock below, the top and bottom of each stone being fox-wedged. The tower contained nine rooms—the seven uppermost having a diameter of 14 feet and a height of 10 feet. These rooms were fitted up for the accommodation of the light-keepers, and the stores necessary for the efficient maintenance of the lights; they were rendered as far as possible fireproof, the floors being of granite covered with slate; the stairs and partitions were of iron, and the windows and shutters of gun-metal. The oil-rooms contained eighteen wrought-iron cisterns capable of storing 4,300 gallons of oil, and the water-tanks held, when full, 4,700 gallons. The masonry consisted of 2,171 stones, containing 62,133 cubic feet of granite, or 4,668 tons. The focal plane of the upper light was 133 feet above high water, its nautical range was  $17\frac{1}{2}$  miles, and in clear weather it overlapped the beam of the electric lights from the Lizard Point. The lantern was of the cylindrical helically-framed type adopted by the Trinity House. The glazing was 2 feet 6 inches higher than usual for first-order lights, this addition being necessary to meet the requirements of the special dioptric apparatus. For the white fixed light exhibited from the three lighthouses of Winstanley, Rudyard, and Smeaton, at the Eddystone, the Trinity House determined on substituting, as a distinction, a white double-flashing light at half-minute periods, showing two successive flashes, each of about  $3\frac{1}{2}$  seconds' duration, divided by an eclipse of about 3 seconds. It was also decided to show from a window in the tower, 40 feet below the flashing-light, a sector of white fixed light, to cover the Hand Deeps, a dangerous shoal  $3\frac{1}{2}$  miles north-west from the lighthouse. It was further arranged that a large bell should be sounded during foggy weather, twice in quick succession every half-minute, thus assimilating the character of the sound-signal to that of the light. Two bells of 40 cwt. each were mounted at opposite sides of the cornice, in order that a windward bell might be sounded during fog. The optical apparatus for the main light consisted of two superposed tiers of lenticular panels, twelve in each tier. Each lens-panel subtended a horizontal angle at its foci of 30 deg., and a vertical angle of 92 deg., being  $47\frac{1}{2}$  deg. above the central plane of the lens, and  $44\frac{1}{2}$  deg. below it; and was composed of a central lens and thirty-nine annular rings or segments, there being twenty-one above and eighteen below the central lens. The twelve panels in each tier were fitted together so as to form a twelve-sided drum, each lens having its focus in a common centre at a distance of 920 millimètres. These lenses subtended the largest vertical angle of any yet constructed for coast illumination, the increased angle and consequent additional power being obtained by the adoption of heavy flint glass for the six highest and the three lowest rings of each panel. The light was derived from two six-wick "Douglass" burners, one being placed in the common foci of each tier of lenses, the illuminant being colza oil. With a clear atmosphere, and the light of the Plymouth Breakwater lighthouse (ten miles distant) distinctly visible, the lower burner only was worked at its minimum intensity of 450 candles, giving an intensity of the flashes of the optical apparatus of 37,800 candles; but whenever the atmosphere was so thick as to impair the visibility of the Breakwater light, the full power of the two burners was put in action, with the aggregate intensity of 1,900 candles for the lamps, and an intensity of the optical apparatus of 159,600 candles. This intensity was about 23.3 times greater than that of the fixed light latterly exhibited from Smeaton's tower, and about 3,282 times that of the light first exhibited in the tower from tallow candles. The new tower was built at a distance of 130 feet from Smeaton's lighthouse, a large portion of the foundation being laid below the level of low-water spring tides. The estimate for the work was 78,000*l*., and the cost 59,255*l*.. The first landing at the rock was made in July 1878, and the work was carried on until December. Around the foundation of the base of the tower a strong cofferdam of brick and Roman cement was built for getting in the foundations. By June 1879 the work was sufficiently advanced for the stones to be laid in the lower courses. On July 17, 1880, the cylindrical base was completed, and the thirty-eighth course by the early part of November. On June 1, 1881, the Duke of Edinburgh laid the last stone of the tower, and on May 18, 1882, completed the work by lighting the lamps and formally opening the lighthouse. The edifice was thus erected and fitted up within four years of its commencement, and one year under the time estimated. The whole of the stones, averaging more than two tons each, were landed and hoisted direct into the work from the deck of the steam-tender *Hercules* by a chain-fall working between an iron crane fixed at the centre of the tower and a steam-winch on the deck of the *Hercules*, which was moored at a distance of thirty fathoms from the rock.



The Town Council and inhabitants of Plymouth having expressed a desire that Smeaton's lighthouse should be re-erected on Plymouth Hoe, in lieu of the Trinity House sea-mark thereat, the Trinity House made over to the authorities at Plymouth the lantern and four rooms of the tower. For taking down and shipping Smeaton's masonry the *Hercules* was moored at ten fathoms from the rock, and the stones were shipped, after the removal of the lantern, by her steam machinery by a process exactly the reverse of that by which the stones of the new tower were landed. After the removal of the structure to the floor of the lower room, the entrance-doorway and well-staircase leading from it to the lower room were filled in with masonry, and an iron mast was fixed at the centre of the top of the frustum.

### A GREEK MONASTERY.

A CORRESPONDENT of the *Daily News* who has lately visited some of the Greek monasteries about Mount Athos, gives the following account of them: On the peninsula are twenty large monasteries, besides a considerable number of smaller ones, of askites, a word connected etymologically with the English adjective ascetic, of the cells of hermits, and of smaller houses which are let out to monks who wish to engage in tilling the ground. Each of the twenty monasteries has a representative who lives at Karyes, and the twenty form the council which governs the Holy Mountain.

A visit to one monastery gives a very fair idea of the arrangements in all. Nearly all were constructed at times when it was necessary to be ready to resist pirates. Greeks and Venetians, Arabs and Genoese, have attacked the fastnesses of the mountain with more or less success. Each one, therefore, resembles a Middle Age fortress. The walls are high; there is but one entrance, which could always be well defended; and many of the dwelling-places are built on the top of the lofty walls. As space must always have been an object, the houses of wood project over the walls. There is no reason to doubt that the appearance of the monasteries is very much what it was six or seven hundred years ago, and the painter in search of picturesque combinations of old buildings will go far—even if he succeed at all—before he finds such curious corners, groupings of towers, houses, churches, campaniles, and projecting stones as he will in such monasteries as Vatopedi. This particular one may be taken as a type of the rest. The fortress-like buildings, surmounted by wooden houses, form a striking object for miles around. Within the walls are massed together among quaint houses in artistic confusion ancient churches, refectory, library, watch-towers, and other buildings which the requirements of a thousand monks have rendered necessary. Everything, however, is orderly and clean. Here and elsewhere the student of architecture should come who wishes to see what was the Byzantine idea. Mr. Ferguson, in his "History of Architecture," has called attention to the rich effect which the interior of Saint Sophia must have presented while it was a Christian church, from the fact of its walls being veneered with dark-coloured marbles, its columns being of the same beautiful material, and its mosaics being in keeping with the general tone of its veneered walls. What the eye of an architect has in great part reconstructed for the church of the Divine Wisdom may be seen in actual existence in many of the churches of the Holy Mountain. The general impression which these churches produce may be compared to that of a modern drawing-room, where the glaring white of a quarter of a century ago has been got rid of, where the colour is subdued, and where a general uniformity of richness and tone has been produced by means of Eastern tapestry and decorations. In the churches there are indeed no carpets, but the floor is composed of various coloured marbles, worked together like parqueterie, and showing that no labour has been too great to secure the result desired. The mosaics on the ceiling give evidence of a similar care, while the walls are covered with frescoes. It may be said at once that the majority of the latter are utterly worthless as works of art, except that the effect of them as a whole is in harmony with the decoration of the church. Some of the frescoes are, indeed, valuable as works of art, and are by Panselinos, the Cimabue of the Eastern Church. It is difficult to say which are really his works, because the monks have the habit of attributing everything to him which is especially well done. Before dismissing the frescoes it is worth noting that in these churches and to ignorant men they must have succeeded in telling a large part of the Bible history. Very quaint and curious some of them are. In the heaven the artist has found a place for Homer, Plato, Aristotle, Sophocles, and other Greek worthies. The hundreds of pictures will be invaluable to anyone who cares to study the costume or the domestic architecture of the Roman Empire of the East during the Middle Ages. Many, perhaps most of them, have been copied over the old drawings within the last century, but the art of the Eastern Church is curiously non-progressive, and the old pictures are reproduced as faithfully as possible, and much more so than they deserve as works of art. When the paintings represent saints, or the Virgin, the closeness of imitation

is of the most servile character. Every line, and every piece of false drawing, is faithfully reproduced. Such, at least, has been, and is to a great extent still, the rule, though I may mention that both in Athens and in the new Greek cathedral in Pera, the pictures of saints have been painted by modern artists of merit, who have altogether refused to bind themselves to the absurd artistic traditions of the Church.

The furniture of the churches in Mount Athos harmonises admirably with the interiors and the shape of some of the thrones, stalls, lecterns, and other fittings is particularly graceful. If it must be admitted that Byzantine art is art in decadence, yet here at Mount Athos it is at least seen at its best. So seen, it is impossible to deny that it has a beauty of its own, and that Byzantine churches in their interiors must have had a harmony of colour and of decoration generally which is usually wanting in those of the West.

### THE NEW PARLIAMENT HOUSE, VIENNA.

THE Imperial Parliament of Austria met for the first time this week in the new buildings in the Ring Strasse, Vienna, which covers an area of about three acres. It is described as forming part of a very noteworthy and striking collection of architectural triumphs. It faces an immense square, which contains the recently-opened Town Hall in the Gothic Renaissance style, and just opposite is the new University in Italian Renaissance, while the new Hof Burgtheater, still under construction, in the style of the gayest Italian early Renaissance, faces the Town Hall. Many other splendid buildings are scattered right and left of this noteworthy square: for instance, the famous Votiv-Kirche, in the purest French Gothic style, the new Palace of Justice, and the two Imperial Museums. But what distinguishes the new House of Parliament from all its neighbours is that, standing on the sloping terrace in front, one overlooks at a glance not only the palatial buildings just mentioned, but a considerable part of the old city, with the ancient cathedral of St. Stephen.

The architect, Theophil von Hansen, deserves to be congratulated on the success of his plans. The front of the House is a combination of three Greek marble temples in the purest style, the middle one, which is the largest, forming the entrance to a centre hall of extraordinary splendour, whilst those on either side serve as entrances, that on the left to the House of Lords (Herrenhaus), and that on the right to the House of Commons (Abgeordnetenhaus). The length of the entire front is 608 feet, and the width of the building 433 feet. The above-mentioned State Hall, separating the two Houses from each other, is 135 feet by 76 feet, and its height is 43 feet. Its crystal glass ceiling rests on twenty-four monoliths of red marble, with gilded capitals, each of these columns being 27 feet high, and the walls are covered with a profusion of gold, marble, and other costly materials. On the other hand, and in contrast to all this splendour, the assembly rooms themselves, for which the whole palace was erected to accommodate, show a marked degree of poverty, not only in their adornments when compared with this hall, but especially in the matter of space. It seems to be the fate of modern architecture to answer well for any other requirement than usefulness and practicability. The Lower Chamber, for instance, which, like the Upper, is built in the form of a semicircle, contains five seats less than the present number of members, and as it has long been in contemplation to increase this number by at least a fourth, the absurdity is very marked. The Lower Chamber, as it now stands, has 354 seats, and the Upper House 192. The building comprises also several committee-rooms, rooms for party meetings, refreshment-rooms, reception-rooms for the presidents and vice-presidents, and so forth, but the galleries for the public in the people's chamber are ridiculously narrow, although in Austria the sittings of Parliament are unrestrictedly public, and the places for the representatives of the home and foreign press are so few in number that it will be considered a rare distinction to be admitted either permanently or occasionally. The works have already been in progress for nine years, and when all the gilding and painting and embellishing is completed, the cost will amount to 10,000,000 florins, or over 800,000*l.*

### BUCKFAST ABBEY.

ONE of the signs and results of the prolonged resistance of the British Celts to their Saxon conquerors in the West of England is the extreme scarcity of very ancient abbeys in Devonshire. Benedictine monasticism was hated as "English," and the British clergy would not even eat at the table or drink from the cup polluted by a Saxon ecclesiastic. As a consequence, only two out of twenty-six Devonshire abbeys date from before the Conquest. One of these is that of Tavistock, the other is the Abbey of Buckfast. Buckfast Abbey lies in the valley of the Dart, between Ashburton and Buckfastleigh, the rapid, foaming river sweeping in a deep curve round the meadows on which it was built. The house was already wealthy in the time of Edward the



Confessor, when 240 villeins and serfs were employed in the cultivation of its lands, and it remained a wealthy house down to its dissolution, owing mainly to its wool trade, which is still carried on in a mill adjacent to and partly constructed from the abbey ruins. In the middle of the twelfth century the monks adopted the Cistercian reform. A deed of Henry II. is still extant (confirming the abbey in its possessions) which bears the signatures of Theobald, Archbishop of Canterbury, and of Thomas à Becket, then a layman and chancellor. A charter of Richard I., granted at Bury St. Edmunds in 1189, further confirmed the monks in their "lands, tenements, mills, fish-ponds, homages, and reliefs, sac and soc," &c., and frees them from "geld and danegelt, hidage and scutage," and other imposts. In 1236 the abbot and monks became members of the Merchants' Guild at Totnes. In 1297 Edward I. was a guest at the abbey. William Slade, who was abbot in 1414, was a distinguished scholar and artist, and largely augmented the convent library. In 1421, a dispute having arisen between Abbot Beaghe and the monks, an award of certain arbiters was read in Chapter, whereby it was settled that the abbot was entitled to order attendance on his guests "according to the ancient and worthy usage" of the abbey, but was not to obtain privileges or exemptions from Rome to the detriment of the house, or, on account of his age and infirmities, to interfere in its government. The last abbot was Gabriel Donne, who was promoted by Henry VIII., and who surrendered the abbey to the king in two years after his election. For this he received an annuity of 1,800*l.* of our money, with the rectory of Stepney, *sine cura*, and was made first a Prebendary, and then a Canon of St. Paul's, before the high altar of which he was buried, after founding a still existing scholarship at Trinity Hall, Cambridge. The arms of the abbey present an example of that play upon words, technically called a *rebus*, of which the mediæval men were so fond. The arms of Buckfast display a buck's head made fast by an abbot's crozier. They are: Sable, a crozier in pale argent, the crook or, surmounted by a buck's head caboshed, of the second, horned gules. The abbey and lands were granted by King Henry to Sir Thomas Dennis. In 1629 they belonged to Sir Richard Baker, the historian. They then passed to the family of the D'Oleys, when the lands were divided. The site of the abbey remained uninhabited till 1806, when a tolerably good Gothic house was built on and partly from the ruins. Of these latter but little remain. There are numerous widely-scattered fragments, a north and south entrance, archways, and a very well-preserved Perpendicular tower of four storeys, known locally as "The Abbot's Tower." The building presents several features of architectural and antiquarian interest, and is undergoing a process of careful and scrupulous restoration under the care of a competent architect. It is to be again inhabited, for the abbey site has recently passed into the hands of a thriving community of Benedictine monks of strict observance, who were lately expelled from a French abbey in the diocese of Sens. Their advent is interesting as an example of "survival" such as could exist nowhere but in a country at once so conservative and liberal as England. The late proprietor sought, and succeeded, to establish by legal process a number of "rights" to which he considered himself entitled as representative of ancient owners, and the result is that the actual prior of Buckfast enjoys several old abbatial rights and privileges which date back from the customs and legislation of mediæval England.

### ARTISANS' DWELLINGS IN DUBLIN.

A REPORT has been prepared for the Dublin Corporation by Mr. Arthur Dudgeon, C.E., upon the utilisation of some of the city land for sites for artisans and labourers' dwellings. The writer says:—

There are two sites available for the purpose in Barrack Street, one having a frontage of about 240 feet and the other a frontage of about 160 feet. Both sites are suitable, and, in my opinion, afford an excellent opportunity for putting in operation the Act of 1866 with every probability of success. I suggest that two blocks of buildings be erected, and that the ground-floor frontages, at the level of and facing Barrack Street, the New Street, and Ellis's Street should be utilised for shops, for which there is a good demand in the neighbourhood. There should be no basements, but above the shops there should be three or four storeys of tenement dwellings, the approach to which should be by staircases leading to galleries or corridors extending the whole length of the buildings in the rear at each floor level, so that separate access may be obtained to each tenement or set of rooms direct from the galleries. Objection is often raised to artisans' dwellings being erected four or five storeys in height, on the ground that the working classes object to have to ascend such a height, and that therefore the top storeys would probably remain unoccupied. Experience, however, proves that such is not the case, but that, on the contrary, a demand exists for rooms at the higher levels. The buildings should be well and substantially constructed, and it would be true economy to make the floor and rooms fireproof, not only for the comfort and security of the tenants, but for the greater stability and longer life that would be

thus given to the structure. . . . In connection with these dwellings, which should afford accommodation not only for families, but for single females and widows, there should be a lodging-house for single men upon the system which is found to work so well in Glasgow. There should also be baths, and a small public wash-house, the wash-house being reserved for the use of the tenants of the dwellings for one day in each week. . . . Buildings such as in my opinion are suitable for the two sites proposed would contain about 670,000 cubic feet, exclusive of the single men's lodging-house, baths, and wash-house. 170,000 cubic feet would be absorbed by the necessary foundations and business premises, with shops and rooms in the rear upon the ground floor at street level, and the balance would be occupied by the upper storeys. These upper storeys, containing 500,000 cubic feet, would provide accommodation for 600 adult individuals, giving each adult about 800 cubic feet gross, or, deducting the walls, floors, water closets, sculleries, &c., from 500 to 600 cubic feet net, whilst the total number of adult individuals accommodated in the buildings, including those in the business portion, would be about 708. I estimate the cost of the buildings, including the capital value of the land, at 20,000*l.*, and the cost of the single men's lodging-house, baths, and wash-house, with the land for same, at 5,000*l.*

The Corporation have adopted the report, and application is to be made to the Commissioners of Public Works for a loan of 25,000*l.*, to be repaid by annuity in thirty-five years at 5 per cent., or, if this cannot be arranged, in forty years at 5*l.* os. 8*d.*

### ON OPEN SPACES IN TOWNS, WITH SPECIAL REFERENCE TO THE REQUIREMENTS OF ARTISANS' DWELLINGS.

BY JOHN HONEYMAN, F.R.I.B.A.

THE paper which I read at the recent congress of the Sanitary Institution of Great Britain, "On the Advantages of Low Ceilings in Small Houses," was intended to direct the attention of those who are interested in the improvement of the dwellings of the poor to one—and not the least important—of those collateral questions, which must be understood and weighed before it is possible to form an intelligent opinion on the greater and more complex problem. The intention of the paper was popularly misunderstood. The suggestion that low ceilings could in any sense be advantageous, or even permissible, seemed at first sight to prejudiced minds to be opposed to all sound sanitary doctrine; a dangerous heresy, in short, certain to lead to the multiplication of rookeries, the increase of overcrowding in an aggravated form, and the erection of high tenements in narrow lanes. It was perhaps not surprising that men connected with municipal bodies here and elsewhere in Scotland should take this very erroneous view. For years they had been getting, or struggling to get, powers to reduce density of population by preventing the erection of high tenements, and requiring the houses of the poorest to have lofty ceilings, and were they to be told at this time of day, when the Lord Advocate's Police and Health Bill had been discussed and amended and presented to Parliament, that they were altogether wrong, and that it was better for the poor people that they should have high tenements and low ceilings? The idea was preposterous, and the teaching (whether true or false, apparently) should not be listened to.

But obviously the question whether a high ceiling in a small house is good or bad may be considered quite apart from the consequences involved, and thoughtful men will so consider it—first on its merits, and then, as I shall ask you to consider it to-night, in its bearing on the regulation of buildings with the view of improving the dwellings and promoting the general welfare of the great mass of our workmen, and more particularly the poorest of the wage-earning classes.

What I ventured to advance in the paper already referred to was that, as a rule, a house with a low ceiling is superior to one of the same capacity with a high ceiling in these respects—roominess, cheapness, comfort, and healthfulness. I also incidentally pointed out that, this being so, it was wrong to prohibit the erection of dwellings with low ceilings; and those who did not take the trouble to consider what I said misunderstood me to advocate the erection of high tenements in narrow streets, without regard to light or air, in order that the working classes might be provided with cheap houses whether suitable in other respects or not. Of course, I never advocated anything of the kind; but local sanitarians, and to some extent our local press, being sent off on this false scent, rather lost sight of the much more important question regarding the best form of room for the special purpose intended. Whether cheapness be or be not the primary essential of a workman's dwelling may be a matter of opinion; but whether a high or a low room is most easily and comfortably ventilated is a matter of fact capable of demonstration by actual experiment. But, having ascertained the best form of room, the next step is to determine how the greatest number of such rooms can be grouped together with due regard to essential sanitary conditions, and this entirely because



subject to such conditions cheapness is undeniably the most important element to be considered. Such aggregation of dwellings will not produce overdensity, but will prevent it; because, if essential sanitary conditions are secured the land cannot be overcrowded with dwellings, and if cheapness is secured the dwellings will not be—or need not be—overcrowded with occupants. The evils of both kinds of overcrowding are generally recognised, and the propriety of arming local authorities with power to control them is admitted; but in this, as in every other case where one man may for the common good be legitimately interfered with in doing what he likes with his own, there must be no doubt about the necessity of the interference or about the proper kind or extent of it; and, quite apart from the question of the curtailment of individual liberty, the legislature ought to take care that it does not sanction such interference as must inevitably defeat its own purpose and leave it without justification. This caution is especially requisite in dealing with land—the utilisation of it for building purposes, and the proper distribution of houses in towns. The mistake common to most building regulations which aim at this is that they are based on an absolutely false assumption—namely, that it is better and more conducive to the health of an urban population to cover the ground with low tenements of houses having lofty ceilings than to cover a smaller area of ground with lofty tenements of houses having low ceilings. In our own case here in Glasgow those who framed such regulations—refusing or despising advice which was as disinterested as it was sound—seem to have set their minds on compelling owners of land and builders between them to give the poor people handsome houses, and they framed their “provisional order” and their Police Bill accordingly, without apparently considering that they could not compel owners and builders to let their handsome houses at low rents; and that the poor people who could not afford to pay high rents—in whose interest they professed to be acting—must therefore be compelled to herd together or remain out in the cold. Ceilings must be high, tenements low, and free spaces, “exclusively belonging to them,” wide, and let the poor people either pay for this improved accommodation or go to—or go—to the model lodgings, shall we say? That is not an alternative to set before our poor fellow-citizens who have the laudable ambition to occupy a house of their own. Apart from the existence of indefensible laws, and the threatened imposition of more, there is no reason why we should not have an abundant supply of healthy cheap dwellings even in the central districts of the city. In this matter of dwellings for the working-classes in town the element of cost can never be ignored; and in order to obtain the greatest amount of good for the greatest number we must not try how much we can compel builders to do, but rather how much liberty we can allow them, never losing sight of this, that if buildings cannot be erected profitably they will not be erected at all.

Now, passing from these introductory remarks, I shall assume that the utility of low ceilings has been proved. But if builders are left perfectly free to make storeys high or low, it by no means follows that they are to be allowed to erect new wynds and closes, or to cover the ground with tenements arranged in any way they may think best. On the contrary, it is obvious that having this liberty they can the better afford to submit—and therefore can more reasonably be required to submit—to some stringency of control in other things. For example, if you say that a tenement is not to be more than 40 feet high, and at the same time insist upon each storey being 10 feet high from floor to ceiling, no more than three storeys could be erected within that limit, whereas if you fix the height of the tenement and say nothing about the height of the storeys, the builder would easily get four in the height, and this might make all the difference between profit and loss, and so between the work being done or not. Such a case I have been told recently occurred in connection with some of the City Improvement Trust ground. A party agreed to take a considerable plot if allowed to make the tenements upon it four storeys high. The Dean of Guild, however, could not sanction this owing to existing self-imposed restrictions, and the whole transaction consequently fell through—the ground remains unoccupied, to the serious loss of the ratepayers generally, as well as of the artisan class in particular, whose supply of dwellings is restricted because it would not pay to erect these tenements less than four storeys high. Precisely in the same way it will be found that granting greater freedom in regard to the height of storeys will make it easier to deal satisfactorily with free spaces; and this is the point which I wish more particularly to illustrate to-night.

First, let me clear away a popular misconception. Free spaces are not required for the purpose of limiting density of population. You may have a very dense population with ample free spaces and quite the opposite with none. Their use is to secure a proper supply of light and air for dwellings; density can be dealt with otherwise. Many years ago my friend Mr. Salmon proposed that it should be limited by simply prohibiting the erection of more than a certain number of separate dwellings on an acre, but obviously this might result in every bit of the acre being covered with small enclosures which, though low, would cause an amount of stagnation in air spaces more prejudicial than the existing state of things; and in any case if we descend into details it would probably be found that the proposal is impracticable, for it must

be remembered that we have to deal with old building ground as well as new, and some acres in Glasgow, and in every other city, would give us a pretty considerable list of proprietors whose exact share of density, or priority of prescription, it would be difficult to determine. But what is density, or rather, over-density of population? In point of fact over-density only begins where dwellings are so crowded or so arranged that some of them cannot get a sufficient supply of light and air. Its existence is determined not by the number of the houses but by their arrangement—a most important distinction. By some arrangements a population of 1,200 can be comfortably housed on an acre without hurtful over-density, by others not half that number without over-density of the most objectionable kind. The prevention of the mere aggregation of dwellings, therefore, is of secondary importance; indeed it is absolutely unnecessary as a sanitary measure, if proper safeguards are provided against close, unwholesome arrangements; and we must never lose sight of this consideration, that we cannot afford unnecessary restrictions. The more we extend freedom in one direction, the more we may venture to curtail it in another without making building as a profitable investment impossible. It is a curious illustration of the complexity of the whole subject to find that the height of ceilings, the density of population, and the extent of free spaces are so intimately related. At first sight the connection is certainly not very obvious—I shall now endeavour to explain it.

We must begin with a distinct idea of what is required. After what has been already said you will, I trust, be prepared to admit that what we require above all things is light and air for every dwelling. Some may be unwilling to give up the idea that free spaces are required in order to spread out the population; but even they will admit the paramount importance of light and air. For my own part, I deny that it is an advantage to spread out the population, and at all events there is no necessary connection between the two things. Whether for many or for few, we must have light and air for all. Now, if you imagine a tenement or block of houses seven storeys high standing north and south, with a free space of say 100 feet on every side, it will be found that every dwelling in it can be as fully supplied with sunlight and air as if the tenement were only two storeys high. If you had only 50 feet of free space you would still have plenty of light and air, and you would still have some sunlight in every apartment—front and back—daily. The disposition of the block in relation to the meridian is important. It will be observed that if it be erected running east and west, whether high or low, only the windows facing south would have any sun; the windows towards the north, and the ground on that side, would never have sunshine summer or winter, whether the tenement be high or low; and in the second instance, with the restricted free space matters would be worse, for in winter at least the ground in front as well as behind would be sunless. I have great faith in sunshine as a sanitary agent, and “a pleasant thing it is to see the sun,” and the more pleasant things we can let into our workmen’s houses the better; still, it must be acknowledged that wind is even more valuable as a purifier, and if the winds have free play along the open spaces running east and west they will go far to compensate for the loss of sunshine. But here again notice that, if you are dependent on the wind and keep your free spaces clear of obstructions, it is of no consequence whatever, whether your tenement is seven or only two storeys high, or whether the space be 100 or only 50 feet wide. If the space be closed in at the ends after the manner of our hollow squares, that is a different matter; we are considering the case of detached blocks, and what I insist upon is, that with free course for the winds of heaven around them, the height is immaterial and cannot interfere with the healthiness of the separate dwellings. Other circumstances may be disadvantageous, but so far as their healthiness is influenced by free spaces the sum and substance of all that can be said is, that if the space be clear of obstruction it is possible to make the dwellings on either side of it healthy either in high or low tenements; if it be properly disposed in relation to the sun, it is possible to make them all bright and cheerful as well as healthy—and therefore probably healthier—and for the same reason it is desirable, though not essential, that the spaces should be wide and the storeys low. We thus see the danger of arbitrary rules interfering with what may be at once the most healthy and economical arrangements; and the propriety of encouraging the owners of land to extend the area of free spaces as much as possible, and of preventing them from curtailing it unduly. The favourite policy of municipal bodies has an opposite tendency. By hard and fast rules as to the width of courts, the formation of mews, lanes, &c., they prevent better arrangements than such rules secure, while by limiting the height of tenements and insisting upon each storey being needlessly high, they discourage any voluntary surrender of free space and practically convert the minimum which they demand into a maximum. That there may be no misunderstanding about this, let us contrast with some minuteness the arrangements possible on ground restricted in these respects and on ground without restriction.

Let us take a piece of ground 250 feet by 150, bounded by streets 50 feet wide, the ends of the parallelogram facing east and west; on such a plot, if unrestricted, it would be quite easy to place three blocks of dwellings running north and south, with a



space of 57 feet between each; and if the storeys are 8 feet high the total height of each block, if five storeys high, will be 45 feet. The open spaces between these blocks would be dried and brightened by the sunlight every day when there was any, and every dwelling would get a share of it forenoon or afternoon. If we suppose there are four dwellings entering from each landing, the total number will be 180. There is no good reason why these blocks should not be six storeys high, but, restricting them to five storeys as above, we have on the plot 180 houses, with ample provision for every one of them being supplied with light and air, and so far as the disposition of the buildings on the ground is concerned, that is the only essential requisite. The planning of the buildings, the number of the apartments in each dwelling, the means of ventilation, &c., are important matters of course, but they have nothing to do with the question immediately before us. The houses can be arranged healthfully in the way I have described.

Now let us see how we can utilise the ground if it is laid off according to our Police Bill or the self-imposed restrictions of our Improvement Trustees. In the first place, we must run a mews lane through it from east to west, and we must then arrange our tenements along each side of the parallelogram, and we must not make them more than 35 feet high if they are 40 feet wide, and less if they are more, so that they cannot be more than three storeys high; and assuming, as in the other case, that there are four houses on each landing, the total number which we could possibly put upon the ground would be 120. In the other case we had 180 larger houses, the tenements being 5 feet 6 inches wider, and we could quite easily, if required, have had other 70 without altering the sanitary conditions of any of them—that is, 250 houses against 120. Now, there would be some conceivable excuse for such restrictions if it could be shown that they secured healthier conditions in the 120 houses; but, so far from this being the case, it is easy to show that the very opposite holds good. Every one of the 120 houses would be worse than any one of the 250 in some respects, and half of them would be worse in every respect. So much depends on the elucidation of this point that it is necessary to go somewhat into detail, and to compare carefully the various sanitary possibilities in each case.

Now, the 250 dwellings would be superior to all of the 120 in these respects—first, they would have low ceilings with proportionately larger floor areas. They would, therefore, be roomier, warmer, and better ventilated. Everyone will admit that each of these points of superiority in a dwelling contributes to its healthiness. Secondly, the 250 houses would be cheaper than the 120. A person could afford to take one of them who could not afford to take one of the others. If, therefore, nothing but the dearer house could be had, the only possible alternative for the poor man would be to share one of these houses with another poor man, the difference being this—and I beg you will take special notice of it—that in the one case you have two poor families occupying one house, in the other you have each of these poor families occupying a separate and superior house; and I ask you to say which of these conditions is most conducive to the health of the community? It may perhaps be objected that, given the cheaper dwellings, the poor families would club together all the same. To some extent no doubt they might, but observe in the other case, where only dear houses are obtainable, they must. Besides, let not this be forgotten, that the two poor families would be more healthily housed in a large low house than in a small high one. We have thus seen that in two particulars all the 250 houses will be superior to any of the 120. In one respect only would any of the latter be superior to the former—about half of them, if facing south, would have a few more hours' sunshine, or the possibility of it, as one side of each tenement would be exposed to the sun; but this apparent advantage is more than counterbalanced by the exposure of the other side to the north and the exclusion of the sun—partial in summer and total in winter—from the streets and open spaces. It has been said that wind dries such spaces more effectually than sunshine, but that is certainly not borne out by my observation in the streets of Glasgow. I have often noted that while the streets running east and west were wet, those running north and south were perfectly dry, and this with west and even with north-west wind. But be this as it may, you will, I dare say, agree with me that "baith's best," and if so, you will acknowledge the superiority of the tenements with many dwellings. In these, as we have seen, both sides get a share of the sunlight which freely plays on every corner of the open spaces, while in the other these spaces, with their dismal mews lane, remain cold and damp and cheerless; so that while we may admit that in certain circumstances this arrangement benefits a few of the dwellings at the expense of others, its inferiority on the whole is unquestionable.

Lastly, if we make the number of dwellings the same on both plots—120 on each—we get a very much larger area of free space by the first arrangement than by the second, because having sixty in each block we may omit the centre block altogether. We have thus not only better houses, as we have seen, but a free space of 2,647 superficial yards, while by the other arrangement it is impossible to get more than 1,944 yards. The blocks would be a little higher in the first case than in the second—only 12 feet—but with a street 50 feet wide in front of them, they would have a free

space behind of 159 feet 6 inches; whereas the tenements made according to our police regulations, though much longer, could only have a free space of 70 feet behind them. In this respect there is no comparison between the two; and surely the public interest demands that the better arrangement should be permitted.

(To be continued.)

### MIDLAND ARTS CLUB.

THE members of the newly-formed Arts Club held their first social meeting at the Grand Hotel, Colmore Row, Birmingham, on Wednesday. The meeting, which was the first of a series of monthly gatherings of a similar kind proposed to be held in connection with the club, was largely attended by members and friends, and was in every respect of a most successful and enjoyable character. Among the numerous art exhibits distributed about the room was a fine collection of original paintings, mostly lent by the artists who are members of the club; amongst them a life-like portrait of the late Mr. J. H. Chamberlain, by the honorary secretary, Mr. Edward Bingley; a very ambitious and successful *Study of a Silver Birch Stem*, by Mr. Acton Butt; and an equally meritorious work of a similar character, by Mr. Wellesley Cotterill, deserve special mention. A very attractive collection of water-coloured landscape and figure sketches, by Mr. S. J. Barnes; a well-filled folio of original drawings by Mr. Showell; and a collection of etchings, by Mr. Derrington, also attracted much attention. Architecture was well represented by a number of artistically-conceived and well-drawn designs by Mr. Henman and Mr. John Cotton; and the president, Mr. Joseph Moore, lent a number of commemoration and presentation medals, all fine examples of art medal-work. Mr. W. A. Langston, who was responsible for the musical portion of the programme, gave several selections on the pianoforte, and other musical contributions, vocal and instrumental, were given by different members, and contributed materially to the success of the meeting.

### THE DUNFERMLINE HIGH SCHOOL.

A MEETING of the promoters of the new High School and Dunfermline Burgh School Board was held last week for the purpose of hearing a report by the committee on the competitive plans for the building. The Earl of Elgin occupied the chair. The report was as follows: Keeping in view the terms of the remit of date September 6 last, your committee, after considering the matter, agreed to solicit plans from a limited number of architects, and to offer a premium "of 15*l.* 15*s.* to be paid to the architect (other than the architect appointed) who, in the opinion of the promoters, should lodge the most suitable plans, and 10*l.* 10*s.* to the architect who, in their opinion, should lodge the next best plans." The architects from whom it was agreed to solicit plans were: Messrs. J. C. Walker, John Starforth, Peter L. Henderson, and Anderson, Edinburgh; James A. Mercer, Liverpool; Messrs. Campbell Douglas and Sellars, H. & D. Barclay, & Ritchie, Glasgow; John Melvin & Son, Alloa; and Andrew Scobie & John Houston, Dunfermline. Of these Messrs. Walker, Anderson, and H. & D. Barclay declined to compete. Plans were received in due time from the others, and, after much anxious consideration, your committee beg to recommend the plans prepared by Mr. Mercer and Messrs. F. & G. Holm as being the most suitable, taking into account the funds at the disposal of the promoters. Further, they recommend that the premium of 15*l.* 15*s.* be awarded to Mr. Scobie, and the premium of 10*l.* 10*s.* be awarded to Mr. Starforth. The recommendations were adopted.



Messrs. Blomfield, Scott, and Street.

SIR,—I should be glad to be allowed to make some reply to the letter signed "Not an Architect," which appeared in your issue of Nov. 24; and first let me say that the words "a few instances within my own knowledge"—the latter of which are italicised—seem to be treated with rather undue emphasis, inasmuch as two of the places are labelled with wrong names, and can only be guessed at by the context.

With regard to the church and vicarage at East (not West) Heslerton, I can only say that there was an organ-chamber in that church—whether or not it has been put to other uses I do not know. The contractor for the vicarage was allowed to use some tiles at his particular request, on the distinct understanding that they were to be replaced if defective; but, owing to the death of Mr. Street, the builder was, I believe, enabled to make a compromise which, under other circumstances, would not have been



possible. The little shingled bell-turret at West Lutton, which is dubbed by "Not an Architect" simply "Luttons," has certainly no staircase, nor was it necessary to make a sacrifice of effect by putting one when a ladder would answer the purpose.

As for the painting over of a brass screen at the same church, that, I think, cuts at least equally as much the other way. Only the other day I was told of some oak stalls of Mr. Street's design being varnished—for the sake of harmony perhaps—and I cheerfully offer this contribution to the list of "Not an Architect," as belonging to the same category as the last item in his count.

Mr. Street was induced for a short time to discontinue the use of felt in roofing, by the destruction of the roof of a church of his in London owing to the ignition of that material. Weaverthorpe church was no doubt built at that period, and the omission, though perhaps not pardonable, is quite explicable. About the disasters at Christ Church, Dublin, and Torquay, I know nothing, but I think the works can stand on their own merits. I have had a proof quite lately that in the latter case at least the authorities are quite the reverse of discontented with what they have got, and both Mr. Roe and Sir Tatton Sykes have testified in many ways to their appreciation of their architect's work. The reredos question at Luton Hoo seems to concern the eminent sculptor employed there more than the architect, and the latter could hardly have failed to let his client know of the sculptor's increased demand, even if the latter did not take the thing into his own hands.

Yours obediently,

Nov. 29, 1883.

ARTHUR EDMUND STREET.

SIR,—I have only now seen a letter in *The Architect* of November 24, signed "Not an Architect." Allow me to contradict authoritatively an inaccurate statement as to Christ Church Cathedral. It is incorrect to say that Mr. Street "left the drains in the crypt without any outlet." It is not the fact that the crypt used to "fill with water," and it is untrue that fifty or any letters were ever sent to Mr. Street on this subject. Mr. Street was dead before the necessity for deeper drainage appeared. The crypt was elaborately drained at the restoration at a depth of 18 inches under the floor level. It was but recently noticed that rapid disintegration of the masonry of the piers was going on, partly from exposure after many centuries to the air, partly from moisture drawn up by capillary attraction from a low level. Excavations proved the existence of springs so copious below the levels of the drains that it was thought advisable to find an outlet at a still lower level under the foundations some 10 feet under the floor level. It was found necessary to make an intercepting drain on the north side at a previous time, but the action of the copious subterranean springs existing on the hillside, on which the cathedral stands, was only discovered by the experience and observation of some years, and was not such as Mr. Street could be reasonably expected to be informed of, or to require extraordinary or exceptional dealing with.

So admirable is the restoration of Christ Church Cathedral as a whole, and so evident at every hand the personal devotion of Mr. Street's mind to it, that no one here, I think, would be ungenerous enough to cavil at trivial deficiencies in details, or unreasonably expect provision against every unforeseen circumstance which may be developed in the years after a work has left an architect's hand.

Your obedient servant,

THOMAS DREW, R.H.A., Architect.

Chapter Room, Cathedral of the Holy Trinity,  
Dublin: December 3, 1883.

SIR,—Mr. Blomfield's assumption that I want to injure professionally a person quite unknown to me, is absurd. His peculiarly snappish style provokes a retort. I leave him in the competent hands of "A Provincial Architect," who deals far heavier blows than I did at "the cormorant-like spirit" of some who bring the whole profession into discredit. "A Provincial Architect's" good suggestion that local architects might be employed to see to work designed by their greater brethren, was, I believe, urged upon Mr. Street in the case of Dublin Cathedral, and declined. Hence many of the mistakes which had to be rectified afterwards at great cost, and some others which are irremediable, e.g., the combed ashlar and glass-papery carving. It might be a question, Who is to pay these gentlemen's fees?

If I have mistaken Mr. Christian's sayings or doings about the high roofs at St. Albans and Southwell, I beg to apologise to him. The St. Albans case is most to the point; and there he was one of the deputation whose report to the Royal Institute of British Architects caused that body to pass a resolution begging the St. Albans people to stay their hands, and refer the roof matter to the arbitration of the Royal Institute of British Architects. The last paragraph of his letter of Jan. 18, 1879, seems only to advocate a roof of "oak and heavy lead." Mr. Christian, by-the-by, is the only architect I know of who has the courage to use teak for church work. I remember a very costly restoration of Street's in which he paid nine shillings a foot for oak for a concealed roof, while teak might have been had in baulks of 40 feet long for just half the money—a puzzle to one who is

Dec. 4, 1883.

NOT AN ARCHITECT.

#### Mission Chapels.

SIR,—Can any of your readers inform me the names, accommodation, description of materials used, and cost of any plain mission churches built within the last six years in conformity with the rules of the Incorporated Society for the Enlargement, Building, and Repairing of Churches and Chapels? Any communications on the subject, either through your valuable journal, or addressed to D. P., care of Mr. J. W. Bells, Nuneaton, Warwickshire, will be much appreciated by

Yours faithfully,

ONE INTERESTED.

#### ARCHÆOLOGY.

**Roman Villa at Frilford**—Another important addition to the archæological discoveries which have of late been made in Berkshire or upon its borders is recorded. Mr. James Parker, of Oxford, has completed the excavation of a Roman villa in an arable field at Frilford, near Abingdon, and succeeded in making a very accurate plan of its formation. As nearly as can be made out, the villa consists of eight or ten rooms, the largest of which is about 16 feet square, and the whole series are about 70 feet in length and between 20 feet and 30 feet in breadth. At the south-eastern corner of the dwelling, where the larger rooms are situated, was found a singular hypocaust, or subterranean stove for heating the building. Mr. Parker says that the hypocaust is usually composed of hollow tiles about 8 or 9 inches square; but in the present case there are twelve piers—he cannot call them by any other name—made out of the stone of the neighbourhood, built together, each pillar being from 2 to 3 feet in diameter, and it was between these pillars that the warm air ramified to heat the building. Some of this construction is unfortunately gone, as it was situated only a few inches beneath the surface of the soil. At this point was also found a large quantity of tessaræ, some of which were interesting from the fact that they were of white marble, and therefore must have come from another district. At a little distance to the east are traces of one or two other chambers, but only vestiges of the walls remain, the greater portion having evidently been taken away at some former period. Part of the bottom of this chamber or chambers is composed of concrete made of pounded tile, about an inch thick, apparently for holding water, while underneath the lower wall were found a couple of drainage-pipes in the most perfect condition. One of these appears to have communicated between the bath and what was apparently a pond a hundred feet off. The level of this pond being higher than that of the bath somewhat puzzled Mr. Parker and those with him, it being difficult to see how the water got there if its purpose was to supply the bath, while, on the other hand, it was not easy to determine how if it was used as a drain for the bath the water could be made to flow uphill. The problem was not much elucidated by the discovery in the depression of a large quantity of old bone, &c., which seemed to indicate that it was used by the Romans as a rubbish-hole. Some excavations being made, a large stone was found beneath the rubbish, and underneath the stone a hole which appeared to communicate with the bath, and this somewhat cleared up the mystery regarding the use of the supposed pond.

**The Saxon Cross, Chester-le-Street.**—A paper "On the shaft of an inscribed Saxon cross discovered during the recent restoration of the church at Chester-le-Street," by Professor George Stephens, of Copenhagen, was read at a late meeting of the Newcastle Society of Antiquaries. The materials of the paper had been furnished by Mr. Robert Blair and the Rev. G. F. Browne, and the shaft had been drawn and chemityped about one-seventh by Professor Magnus Peterson. The shaft was discovered during the repairs of the church in June last. The square block consisted of close-grained sandstone, 2 feet 11 inches high, by 8 inches broad below and 7 above. There was no direct evidence of the age of the stone, and the opinion of the writer was that "Eadmund," the name inscribed on the stone, was that of some unknown local magnate. What was characteristic in the inscription was the intermixing of Runic and Roman letters. The full significance of this stone and similar things was very uncertain; but every find helped them onward in the difficult study. When all our sculptured memorials were carefully drawn and published, they would be able to understand much which was now more or less hidden from them. The Rev. Dr. Bruce said it was very curious how the Roman letters were now progressing. The Roman alphabet was the language of all the English speaking people, and some of the Eastern languages were now being rendered in Roman characters. Even the people of China and Hindoostan were in some cases adopting the Roman characters. Such a progression was very remarkable.

**The Italian Government** have conferred the Great Silver Medal for Art and Science upon Mr. William Emerson, F.R.I.B.A., and Mr. R. E. Cooper, C.E., in recognition of the merits of their design for the Victor Emanuel memorial. An illustration of it appeared in *The Architect*.



## CHURCH BUILDING AND RESTORATION.

**Edinburgh.**—The new St. Michael's Church was opened on November 28. The site is at the junction of the Slateford and North Merchiston roads. The style is early thirteenth-century Gothic. There are three aisles, divided by stone pillars supporting richly-moulded arches, and a lofty clerestory. Towards the east end there is a transept for the organ, the arch of which rises into the clerestory. At the opposite end, over the principal entrance, a massive tower—20 feet square inside—rises to the height of 130 feet above the street. Access to the different floors in the tower and to the roof of it is obtained by a turret staircase, which rises at one corner above the parapet. The length of the church inside is 130 feet, the width 62 feet 6 inches, and the height to the ridge, 70 feet. A small portion of the west end of the nave serves as a vestibule, and is covered by a small gallery. The screen dividing this vestibule from the church is of panelled woodwork, having stained glass in the upper panels. The pews are arranged with a centre passage, and one in each of the aisles, and accommodate fully 1,000 people, allowing a width of 20 inches for each. The pulpit stands at one side against the westernmost pier of the transept. There is a reading desk at the other side, and at the end against the east wall is a large and elaborate screen with illuminated panels containing the Creed, the Lord's Prayer, &c. The pulpit is of walnut. The panels of it and of the reading desk are filled with paintings of the fruits of the Bible on a gold ground, which were executed by the Hon. Mrs. Hope. There are two doors of egress towards the east end of the aisles, and a minister's door giving access to the vestry from the platform. Adjoining the church at the west end are a session-house, two large halls for Sabbath-school purposes and meetings, and a beadle's house. The halls, as well as the church, are heated by hot-water apparatus. The east gable has three large lancet windows with clustered shafts between, and a panel of similar design at each side, underneath which an elegant arcading with clustered shafts extends across the gable. The capitals are carved, and the mouldings enriched with dog-tooth ornament. There is no tracery in any of the windows. The floors of the porch, vestibule, and subordinate passages are laid with encaustic tiles. The lamps, specially designed by the architect, will be of polished brass. The architect was Mr. John Honeyman, of Glasgow, and the clerk of works was Mr. J. McIntosh.

**Liverpool.**—The foundation-stone of a new Scandinavian church for Liverpool, with the title of Gustafs Adolfs Kyska, was laid on Saturday, the 1st inst., by Mr. Samuel Smith, M.P., the Bishop of Liverpool, assisted by the Swedish pastor, conducting the religious part of the ceremony. The building, of which Mr. W. D. Carøe, M.A., of London, is the architect, comprises a church to seat 550 adults, a large reading room and lecture hall in the basement, and an attached residence for an assistant pastor. The architecture will be a new departure from the types commonly seen in this country. The various simple characteristics of the early architecture of Scandinavia in its different developments in Denmark, Sweden, and Norway, have been freely employed and united to form an at once harmonious, picturesque, and very inexpensive group. The greater part of the funds have been contributed by the King and people of Sweden and Norway. The site of the building is at the corner of Park Lane and Cornhill. Mr. John Shillitoe, of Upper Norwood, London, is the builder.

## SCHOOL BUILDINGS.

**Stratford-on-Avon.**—Board schools to accommodate 400 children, erected at a total cost of 5,600*l.*, have been lately opened. The schools are situated in Chestnut Walk, and have been erected from the designs of Mr. Milne, architect, of London. The cost per head is about 10*l.* 10*s.*

**Bacup.**—A chapel and school are about to be built at Troughgate, Britannia, near Bacup (Lancashire), for the trustees of the Methodist Free Church. The chapel will be seated for 500 adults, and the school will accommodate 500 scholars. The plans have been prepared by Messrs. Maxwell, Tuke & Hurst, architects, Southport, and the works will be carried out under their superintendence.

**Tranmere.**—This school has been completed from designs by Mr. G. E. Grayson. The first floor is fireproof throughout on Lowe's improved system of iron beams, cross joints, and cement concrete. The upper surface is of Lowe's wood blocks laid in patent preservative composition. The blocks are long and narrow, with joints quite close, resembling parquetry. Similar blocks have been used elsewhere in Liverpool. In one basement where they are set the weight to be carried is generally about two tons per superficial yard, and although the basement has been flooded occasionally, the blocks have remained unloosened.

**Worcester.**—The Sunday-schools erected for St. Mary Magdalene parish have been opened. The walls of the building are faced externally with brown and grey Bromsgrove stone, in random courses, rough punched, and relieved with Bath stone bands. Internally with red-pressed bricks to the height of 4 feet

3 inches, and above this height with Ironbridge buff-coloured bricks, and an intervening band of red and buff bricks in diaper pattern. The windows and other dressings are of Bath stone. The roofs are all of pitch pine, open timbered, plastered between the rafters, supported by well-framed trusses having arched ribs, and are covered with red Broseley tiles. The internal joiner's work is of yellow deal varnished. The floors are of wood blocks laid herring-bone pattern on a bed of concrete, and the entrances are laid with Webb's encaustic tiles. The works have been carried out by Mr. J. H. Beard, from the designs of Mr. Lewis Sheppard, Sansome Walk, Worcester.

## NEW BUILDINGS.

**Bank of Scotland, Edinburgh.**—The scaffolding which has surrounded the dome of the Bank of Scotland for some months has been removed, and the alterations which have been carried out on the lantern and dome can now be seen. Some time ago it was found that the oak pillars which carried the lantern had begun to decay in consequence of the very exposed situation, and the directors decided, on the recommendation of their architects (Messrs. Kinnear & Peddie), to have them removed, and galvanised iron pillars substituted. At the same time, it was decided to make an alteration in the design of the lower part of the lantern where it springs from the dome, which had not been very satisfactory in appearance. Mr. Bryce's design had apparently been founded upon that of the well-known dome and lantern of a church in the Forum in Rome, adjoining the column of Trajan, in which the base of the lantern is corbelled out from the top of the dome, instead of springing out of it without any increase of diameter, as is more usual. The result in the case of the bank, however, was to give the lantern an appearance of instability, or at least insecurity, and the narrow neck where it actually rose out of the dome destroyed the appearance of continuity between the two which was required for a satisfactory and graceful outline. This has now been got over by the introduction of scrolls at the eight corners of the base of the lantern, and by spreading out the base between them. These have been also executed in galvanised iron, and the whole is now practically indestructible. When engaged on these works, the directors also directed Messrs. Kinnear & Peddie to inquire into the security of the building from lightning; and, after consultation with Professor Tait, Messrs. Ritchie, under the direction of the architects, added to the number of the points, and ascertained by testing that the earth connection was of good conducting capacity.

## GENERAL.

**Royal Society of Painters in Water-Colours.**—The following artists were elected on November 30: Members—H. Stacey Marks, R.A., E. J. Poynter, R.A., Edward F. Brewtnall, Charles Gregory, Herbert M. Marshall, J. W. North. Associate—J. H. Henshall.

**The Cambridge Antiquarian Society** have offered to present their collection to the University for preservation in the new Archaeological Museum.

**Mr. Belt** has received a commission to execute a bust of the Earl of Shaftesbury for Exeter Hall.

**Mr. George Reid, R.S.A.**, has prepared a series of drawings of the river Tweed, which are to be reproduced by M. Durand for the Royal Association for Promotion of the Fine Arts in Scotland.

**The Calcutta International Exhibition** was opened on Tuesday by the Marquis of Ripon. The weather was, however, exceptionally unfavourable.

**A Faculty** is to be obtained for restoring Lindfield parish church, in accordance with the plans of Mr. Somers Clarke.

**The Guarantee Fund** for the Fine Art and Industrial Exhibition, proposed to be held at Wolverhampton next June, has reached the sum of 7,000*l.*

**The Sculpture** of the mausoleum from Halicarnassus is now arranged in a new gallery at the British Museum.

**Mr. G. A. Audsley** on Wednesday delivered a short address at the Dundee Fine Art Exhibition on the subject of "The Importance of Home Culture in Taste and Art."

**Dr. Stubbs**, Professor of Modern History at Oxford, has been appointed a trustee of the National Portrait Gallery, in place of the late Lord Somers.

**The Irish Poor Law Unions** have adopted schemes for the erection of 6,744 labourers' cottages, at an estimated cost of 580,978*l.*, or about 86*l.* each.

**A New Palm House** is to be erected in the Botanic Gardens, Glasnevin, co. Dublin, at a cost of 4,300*l.*

**The Contract** has been signed for the construction of a new bridge over the Tiber in Rome.

**The Coventry Chamber of Commerce** on Monday adopted a resolution approving of the establishment of a technical school for the city.

**Mrs. John Elder** has purchased thirty-five acres of the lands of Fairfield at the cost of 37,500*l.*, with the intention of presenting them as a public park to the people of Govan.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, DECEMBER 8, 1883.

### TENDERS, ETC.

As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.

Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."

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### EDITORIAL NOTICES.

The authors of signed articles and papers read in public must necessarily be held responsible for their contents.

No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.

Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.

### NOTICE TO THE PUBLIC.

By the Post Office arrangements THE ARCHITECT can now be sent to any part of the United Kingdom by an affixed Halfpenny stamp; hitherto the postage has very frequently been twopence per copy. The Publisher will be happy to forward, for 20s. per annum, post paid, THE ARCHITECT, to residents in towns and neighbourhoods to which there is no easy access by railway. Terms for the half-year, 10s.

Our readers are invited to address us on subjects of interest to themselves or the public. We shall be always ready to insert letters asking for a solution of any suitable questions of a professional or practical nature, and to receive replies to such inquiries.

### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 19 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

### CONTRACTS OPEN.

ASHBOURNE.—Dec. 17.—For Repairs to Railway Tavern. Mr. George Marshall, Ashbourne.

AUDENSHAW.—For Converting Dwelling-houses into Stores, Offices, and Board Room. Mr. J. H. Burton, Architect, Warrington Street, Ashton-under-Lyne.

BAIPEP.—Dec. 8.—For Alterations and Additions to the Workhouse. Mr. George Eyre, Architect, Codnor, Derby.

BIRMINGHAM.—Dec. 8.—For Supplying and Fixing Speaking Tubes and Electrical Communication, Lift, and Fireproof Doors; also Clock for Tower, Parish Offices, Edmund Street. Mr. W. H. Ward, Architect, Paradise Street, Birmingham.

BLYTH.—Dec. 21.—For the Erection of the Thomas Knight Memorial Hospital at Blyth. Mr. J. Hogg, Architect, 4 St. Mary's Place, Newcastle-on-Tyne.

BOLTON ABBEY.—For Building Memorial Tower of the late Lord Frederick Cavendish. Messrs. Worthington & Elgood, Architects, 110 King Street, Manchester.

BRADFORD.—Dec. 11.—For Rebuilding Manufactory, Warehouse, and Offices for Messrs. Glover, Son & Co., Limited. Mr. Wilson Bailey, Architect, 9 Market Street, Bradford.

CHIPPING NORTON.—Dec. 18.—For Construction of Goods Shed, Plans, &c., at the Engineer's Office, Paddington Station.

CLACTON-ON-SEA.—Dec. 10.—For Enlargement of the Waverley Hotel. Mr. Charles Bell, Architect, Dashwood House, 9 New Broad Street, E.C.

CONSETT.—Dec. 15.—For Building Two Blocks of Seven Cottages, One Block of Fifteen Cottages, and Additions to Twelve Cottages, Leadgate. Plans at the Offices of the Consett Iron Company, Consett.

COWLING.—Dec. 15.—For Building Parsonage House and Offices. Messrs. Holland & Son, Architects, Newmarket.

CULTS.—Dec. 11.—For Building Boiler and Engine Houses and Keeper's Cottage. Mr. William Boulton, Town House, Aberdeen.

DEWSBURY.—For Restoring and Enlarging Parish Church. Messrs. Kirk & Sons, Architects, Market Place, Dewsbury. Mr. A. E. Street, M.A., and Mr. A. H. Kirk, Joint Architects.

ELGIN.—Dec. 24.—For Building Town Hall. Messrs. Matthews & Mackenzie, Architects, Aberdeen.

ESTON.—Dec. 8.—For Building Boundary Walls to Cemetery. Mr. Henry Leggett, Clerk to the Eston and Norby Burial Board, Normanby.

FELIXSTOWE.—Dec. 11.—For Enlargement of the Suffolk Convalescent Home. Mr. E. F. Bisshopp, Architect, Museum Street, Ipswich.

GOSFORTH.—Dec. 10.—For the Continuation of Linden Road and West Avenue, Park Estate, South Gosforth. Mr. Edward Shewbrooks, Architect, 2 Market Street, Newcastle-on-Tyne.

GREENOCK.—Dec. 19.—For the Works of the Third and Remaining Section of the Municipal Buildings. Messrs. H. & D. Barclay, Architects, 136 Wellington Street, Glasgow.



**HALIFAX.**—Dec. 14.—For Building Shed and Alteration of Premises, Hare Street. Mr. John Willey, 30 Southgate, Halifax.

**HOPE HALL.**—Dec. 13.—For Building Twelve Through Houses. Mr. Joseph Wilson, Architect, Queen's Road, Halifax.

**KITTYBREWSTER.**—Dec. 11.—For Building Wooden Shed. Mr. W. Moffatt, Secretary, G. N. S. Railway, Aberdeen.

**LEEDS.**—Dec. 11.—For Building Engine Erecting Shop. Mr. William Hill, Architect, 11 Park Square, Leeds.

**LEICESTER.**—Dec. 12.—For Taking Down Boundary Wall to Borough Gaol, and Building Boundary Wall on Improved Street Line. Mr. J. Gordon, C.E., Borough Surveyor, Town Hall, Leicester.

**LEYTONSTONE.**—Dec. 12.—For Building an Addition to Female Imbecile Ward at the Union Workhouse. Mr. F. E. Hilleary, Clerk, Guardians' Offices, Union Road, Leytonstone.

**LLANISHEN.**—Dec. 31.—For Construction of Large Storage Reservoir with Embankments, Valve Well, Culverts, Gauge Basins, &c. Mr. J. A. B. Williams, C.E., Queen's Chambers, Queen Street, Cardiff.

**LYMM.**—Dec. 11.—For Erection of New School Buildings and Master's House for the Governors of Lymm Grammar School. Mr. F. R. Hawby, Architect, 8 St. Ann's Place, Manchester.

**NORTH SHIELDS.**—Dec. 11.—For Building Additional Boys' Classrooms at Eastern Board Schools. Mr. F. R. N. Haswell, Architect, North Shields.

**OSWESTRY.**—Dec. 18.—For Construction of Railway Station. Plans at Engineer's Office, Paddington Station.

**PAR.**—Dec. 20.—For Erection of Station Buildings. Plans, &c., at the Office of the Engineer, Plymouth Station.

**PORTO RICO.**—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

**SHEFFIELD.**—Dec. 15.—For Retort House and other Buildings for a Gas Works at Rockingham Colliery. Messrs. Newton, Chambers & Co., Thorncliffe Ironworks, near Sheffield.

**SHEFFIELD.**—Dec. 8.—For Erection of the Montgomery Hall, New Surrey Street. Mr. C. J. Innocent, Architect, 17 George Street, Sheffield.

**SWANSEA.**—Jan. 23.—For Erection of New Blocks and Extensions and Alterations to the present Swansea Union Workhouse. Messrs. Blessley & Aspinall, Architects, Cardiff.

**WEST WALKER.**—Dec. 22.—For Extensive Additions and Alterations to the Board Schools. Mr. John Johnstone, Architect, 6 Clayton Street West, Newcastle-on-Tyne.

**WOOLWICH.**—Dec. 10.—For Alterations to Pews and Cleansing and Redecorating St. Mary's Church. Mr. J. O. Cook, Surveyor, 24 William Street, Woolwich.

## TENDERS.

### BARNARD CASTLE.

For Erection of North-Eastern County School, Barnard Castle. Mr. R. J. JOHNSON, Architect.	
Johnson, Middlesbrough	£23,181 0 0
Mitchison & Co., Newcastle	21,246 9 0
Elliot, Newcastle	20,475 0 0
Gray, North Gosforth	20,313 5 10
Robson & Son, Durham	20,265 0 0
Lawton, Newcastle	20,121 0 0
Scott & Son, Sunderland	19,733 0 0
Forster, Croxdale	19,000 0 0
Watson Bros., Darlington	19,000 0 0
Ferguson, Newcastle	18,873 0 0
Sanderon, Durham	18,580 0 0
Hepworth, Barnard Castle	18,549 0 0
Dickinson, Saltburn	18,331 0 0
Thorp, Leeds	18,090 0 0
Allison, Whitburn	17,765 0 0
KYLE, Barnard Castle (accepted)	15,448 5 1

### BECKENHAM.

For Additions and Alterations to Stables and Buildings at the Old Manor House, Beckenham, and Formation of Engine Station, Additional Stabling, Cart Sheds, Boundary Walls, and Mortuary, &c. Mr. GEORGE B. CARLTON, C.E. Architect. Quantities not supplied.	
Hollingsworth, Penze	£929 0 0
D. & J. Brown, Camberwell	897 0 0
Jones, Beckenham	894 0 0
Barnett, Shortlands	842 0 0
Marshall, Brighton	800 0 0
Wootton, Penze	775 0 0
Bowdidge & Burley, Millwall	564 10 0
Engineer's estimate	850 0 0

### BOSCOMBE.

For Converting Montrose Villa into Coffee Tavern for the Boscombe Coffee Tavern Company, Boscombe, Bournemouth. Mr. CHARLES P. MILES, Architect.	
Hoare, Bros., & Walden, Bournemouth	£113 0 0
George, Bournemouth	98 0 0
WHINNERAH, Boscombe (accepted)	95 10 0

### BILLINGSHURST.

For Building Residence at Shiprods, Billingshurst, Sussex, for Mr. H. Michell. Mr. WILLIAM BUCK, Architect, Horsham.	
Sharp, Horsham	£2,127 0 0
Pannett Bros., Horsham	1,950 0 0
Newell, Bognor	1,863 0 0
Etheridge Bros., Horsham	1,805 15 0
Taylor, Brighton	1,743 0 0
Brown, Burgess Hill	1,667 7 6
Terry, Storrington	1,667 0 0
LONGLEY, Crawley (accepted)	1,659 0 0
Woolgar & Sons, Horsham	1,653 0 0
Morris, East Grinstead	1,592 0 0
Charlwood Bros., East Grinstead	1,324 0 0

### BOWNESS.

For Additions and Alteration to Premises, Bowness. Mr. ROBERT WALKER, Architect. Quantities not supplied.	
G. H. Pattinson, masonry and walling.	
Latham & Dobson, carpenter and joiner.	
Armstrong, plastering and cementing.	
J. A. Pattinson, plumber.	
Croft, painter and glazier.	

### BRENTFORD.

For the Building of a Cottage and the Extension of Cartshed on the Town Meadow, Old Brentford. Mr. LACEY, Surveyor, Old Brentford.	
Addis, Hounslow	£540 0 0
Hudman	477 0 0
Maton, Kew	466 0 0
Whitman	449 0 0
Grover, Ealing	440 10 0
Waller & Son	437 0 0
Danells, Hounslow	430 0 0
Bryant, Chiswick	420 0 0
Spicer, Brentford	395 0 0
Kent, Bros., Kingston	386 0 0
Bunsden, Brentford	380 0 0
Bloomer, Brentford	350 0 0
HAYNES, Alperton (accepted)	337 10 0

### BURTON-ON-TRENT.

For Construction of a 50 Horse-power Double-flue Lancashire Boiler, 28 feet long by 7 feet, inside measure, Burton-on-Trent.	
Tangye Bros., Birmingham	£465 0 0
Thornhill & Warham, Burton-on-Trent	444 0 0
Wilde & Co., Openshaw	437 0 0
Hawksley, Wild & Co., Sheffield	425 0 0
Thompson, Etingshall	375 0 0
J. & J. Horsfield, Dewsbury	360 0 0
Derham & Co., Leeds	358 0 0
J. & W. BARLOW, Rochdale (accepted)	350 0 0
Arnold & Co., Barnsley	345 0 0
The Phoenix Boiler Co., Bolton	335 0 0

### CARDIFF.

For Alterations to Premises in St. Mary, Cardiff, for the National Bank of Wales, Limited. Messrs. BLESSLEY & ASPINALL, Architects.	
LOCK, Cardiff (accepted)	£1,106 0 0

### CORK.

For Building Diocesan College, Cork, for the Most Rev. Dr. Delany, from plans and specification of Mr. SAMUEL P. HYNES, M.R.I.A.I. Quantities by Messrs. Gribbon & Butler, Dublin and Belfast.	
E. & P. O'FLYNN (accepted).	

Five tenders were received for the erection of the above.

### FLEETWOOD.

For the Superstructure of Post Office and Residence, East Street, Fleetwood. Mr. C. PEARSON SHAW, Architect. Quantities by the Architect.	
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#### Whole Tenders.

Albion Steam Saw Mills, Fleetwood	£1,193 0 0
Smith, Marten	1,175 0 0
Feed, Poulton-le-Fyde	1,153 0 0
Jones, Fleetwood	1,082 1 6

#### Excavator, &c.

Roskell	330 0 0
Albion Steam Saw Mills	280 0 0
Feed	261 0 0
Jones	259 15 4

#### Carpenter and Joiner.

Smith	375 0 0
Albion Steam Saw Mills	372 0 0
Jones	366 13 3

#### Mason.

Johnson	201 0 0
Albion Steam Saw Mills	201 0 0
Atkinson & Clegg	161 0 0
Jones	167 0 0

#### Slater.

Albion Steam Saw Mills	49 10 0
Seed	48 10 0
Jones	46 9 3
Whiteside & Walmsley	44 17 3

#### Plasterer.

Albion Steam Saw Mills	115 10 0
Richardson & Binns	100 0 0
Jones	79 17 0
Whiteside & Walmsley	79 13 6

#### Plumbing.

Parkinson	204 10 0
Preston	180 0 0
Albion Steam Saw Mills	175 0 0
Jones	172 6 8

### HIGHWORTH.

For Works in connection with Building three Houses at Highworth, near Swindon, Wilts, for Mr. Ambrose Willis, of Hannington, Wilts. Mr. WILLIAM DREW, Architect, Surveyor, &c., Victoria Street North, Swindon.	
LOOKER, Stratton St. Margaret (accepted)	£687 10 0

### LANCHESTER.

For Building Primitive Methodist Chapel, Lanchester. Mr. GEORGE RACE, Architect, Weardale.	
Accepted Tenders.	
Taylor, Blackhill, mason	£124 0 0
Race, Weardale, joiner	161 0 0
Race, Weardale, painter and glazier	17 10 0
Wandless, Darlington, slater	32 6 0
Strachan, Blackhill, plumber	14 13 8
Kirby, Bishop Auckland, plasterer	45 0 0

### LEEDS.

For Erection of Outbuildings and Bath-rooms to three Houses in Hyde Park Terrace, Hyde Park, Leeds. Mr. T. WINN, Architect.	
Myers, Leeds, brick, mason, joiner, plasterer, and slater.	
Youngs & Fawcett, Leeds, plumber and glazier.	
Wigginbotham, Bradford, painter.	

### LINCOLN.

For Building Mortuary, Canwick Road Cemetery, Lincoln. Mr. R. A. MACBHAIR, C.E., City Surveyor. Quantities by Mr. Wm. Huddleston.	
Hampshire	£336 0 0
Binns	290 0 0
Crosby & Sons	289 0 0
Footitt	280 0 0
Harrison	278 0 0
H. S. & W. CLOSH (accepted)	244 0 0

### LIVERPOOL.

For Completing Carnatic Road, Mossley Hill, near Liverpool. Messrs. HOULT & WISE, Surveyors, Liverpool.	
Harris	£1,400 7 4
Wilkinson & Co.	1,386 15 0
Catterall & Co.	1,307 0 0
Barrow	1,252 3 0
Dawson	1,241 0 0
R. Thomas	1,190 0 0
Randle	1,112 18 6
M'Cabe & Co.	1,070 0 0
E. Thomas	1,017 15 0
Worthington	1,000 0 0
Anwell	960 0 0
Marr	900 0 0
Ireland & Harley	891 0 0
Speight	848 0 0
STANDING (accepted)	828 0 0
Walkden & Co.	797 0 0

### LONDON.

For the Erection of a Sicilian Marble Grave at Kensal Green Cemetery. Messrs. EBBETTS & COBB, Architects, Savoy House, 115 Strand, W.C.	
Lander	£255 0 0
For Constructing a Bath-room at 16 Carleton Road, Tufnell Park, N., for Mr. F. J. Vials. Messrs. EBBETTS & COBB, Architects, Savoy House, 115 Strand, W.C.	
Cansick	£166 12 0
Steel Bros.	118 0 0
Baylis	103 0 0
For new Model Dwellings, George Square, Hoxton, E., for Mr. J. W. More. Mr. H. GOODWIN BAILEY, Architect. Quantities by Mr. J. T. Carew.	
Price	£4,180 0 0
Bulford	2,880 0 0
Parks & Roberts	2,850 0 0
Williams & Son	2,783 0 0
Robson	2,473 0 0

For a Mission Hall in Denning Road, Hampstead. Messrs. SPALDING & AULD, Architects.

Staines & Son	£782 0 0
Gould & Brand	733 0 0
Grover	687 0 0
Donne	682 0 0
Sobey	680 0 0
Burford & Son	675 0 0

For Building a new Warehouse in Bloomsbury Street, for Messrs. G. Pearce & Co. Messrs. SPALDING & AULD, Architects.

Patman & Fotheringham	£3,373 0 0
Donne	3,300 0 0
Dove Bros.	3,275 0 0
Ansell	3,243 0 0
Martin, Wells & Co.	3,200 0 0
Outwaite	3,139 0 0
Ashby	3,101 0 0
Roberts	3,093 0 0
Woodward	3,093 0 0
GROVER (accepted)	3,088 0 0
For Rebuilding No. 8 Portland Mews. Messrs. SPALDING & AULD, Architects.	
Donne	£1,340 0 0
Outwaite & Son	1,335 0 0
Staines & Son	1,322 0 0
Higgs & Hill	1,310 0 0
Rhodes	1,310 0 0
Martin, Wells & Co.	1,294 0 0
Steed Bros.	1,247 0 0
Howard & Dorell	1,235 0 0
Patman & Fotheringham	1,205 0 0
Ansell	1,194 0 0
GROVER (accepted)	1,131 0 0

### LUTON.

For Building Chimney Shaft at Sewage Works, Luton. Mr. W. H. LEETE, Borough Surveyor. Quantities not supplied.	
Rance Bros.	£264 10 0
W. Dunham & Son	240 0 0
D. Dunham & Son	228 12 6
Ford	224 0 0
BUNN (accepted)	165 0 0
Borough Surveyor's estimate	228 0 0

### NEW BRENTFORD.

For Building Chapel, Boundary Walls, &c., St. Lawrence Church, New Brentford. Messrs. SMITHIES & GLADMAN, Architects.	
GIBSON, Southall (accepted).	



**NORTH ELSWICK.**

For Sewering and Paving Croydon Road, on the Lands Allotment Company's Estate at North Elswick. Messrs. GEORGE & TAYLOR, Surveyors, Westgate Road, Newcastle-on-Tyne. Quantities by the Surveyors.

Middlemiss Bros., Newcastle-on-Tyne	£415 12 0
Robson, Newcastle-on-Tyne	408 16 0
HILL & MAUGHLEN, Newcastle-on-Tyne (accepted)	404 10 5

**PLYMOUTH.**

For Erection of First Block of Buildings in the Reconstruction of Public Markets, Plymouth. Mr. CHARLES KING, Architect, 20 Princess Square, Plymouth. Quantities by the Architect.

Lapthorne & Goad	£5,400 0 0
Foot	4,380 0 0
Reed	4,352 0 0
Debnam	4,274 9 0
Pethick Bros.	4,198 0 0
Finch	4,179 0 0
Stanlake	4,150 0 0
Palk & Partridge	4,081 0 0
Lethbridge & May	3,960 0 0
Roberts & Hurrell	2,892 18 10
Trevena	3,797 0 0

**STREATHAM.**

For Additions to St. Margaret's, Streatham. Messrs. SPALDING & AULD, Architects.

MASON (accepted)	£1,474 11 6
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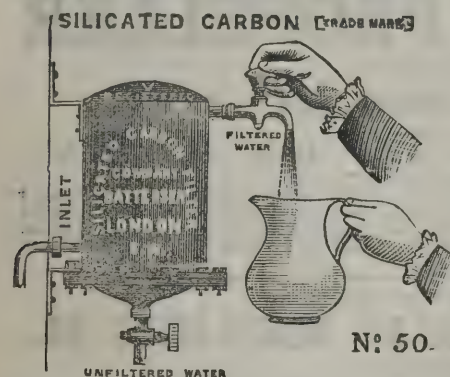
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Harwich. Messrs. WHITMORE & REEVES, 14 Devonshire  
Square, London, Architects. Quantities not supplied.

Harper, Hackney	£2,196 0 0
Garnett, Woodham Walter	1,925 0 0
Gunn, Putney	1,800 0 0
Everett & Son, Colchester	1,799 0 0
Went & Bowen, Wimbledon	1,753 0 0
Saunders & Son, Dedham	1,748 0 0
King, Peckham	1,706 0 0
Wood, Chelmsford	1,694 0 0
Upson, Upper Dovercourt	1,650 0 0
Wilding, Dovercourt	1,600 0 0
List, Finsbury Park	1,600 0 0
Diss, Colchester	1,488 0 0
Belts, Clacton-on-Sea	1,464 0 0
Ayres, Woodford	1,380 0 0
Beckett, Dovercourt	1,355 0 0

**SOUTHAMPTON.**

For Alterations and Additions to the New Forest Hotel,  
Lyndhurst Road Railway Station, for Messrs. Hine  
Bros. Mr. R. H. MITCHELL, Architect, Southampton.

Pike, Totton	£946 0 0
Sanders, Southampton	941 0 0
Brinton & Bone, Southampton	910 0 0
Rowland, Southampton	875 0 0
Stevens & Sons, Southampton	861 0 0
CROOK, Southampton (accepted)	837 0 0

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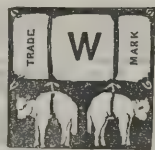
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WALKER, Architect.

LATHAM & DOBSON (accepted).

**WORTLEY.**

For Alterations to House and Shops, Upper Wortley. Mr.  
FREDERICK W. RHODES, Architect, Upper Wortley.  
Quantities by the Architect.

**Accepted Tenders.**

Robinson, Leeds, joiner	£30 10 0
Roberts, Upper Wortley, plumber	24 0 0
Oddy, New Wortley, bricklayer	17 10 0

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Mackie & Son, Wrexham	1 8
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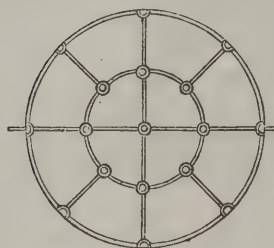
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**PATENT WROUGHT-IRON SASHES WITH WROUGHT BOSSES**

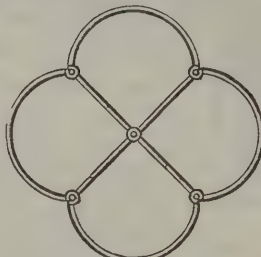
SPECIALLY ADAPTED FOR WAREHOUSES, SCHOOLS, AND PUBLIC BUILDINGS.



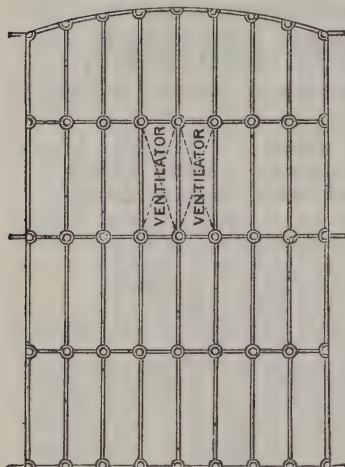
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The Patentee begs to call particular attention to the great strength of this construction. The Bars and Bosses, being of malleable wrought iron, form an exceedingly firm joint at the intersection of bars. They are durable, and of light appearance, the Bosses being small and not unsightly. They can be made at very short notice, and at the price of an ordinary cast iron sash.

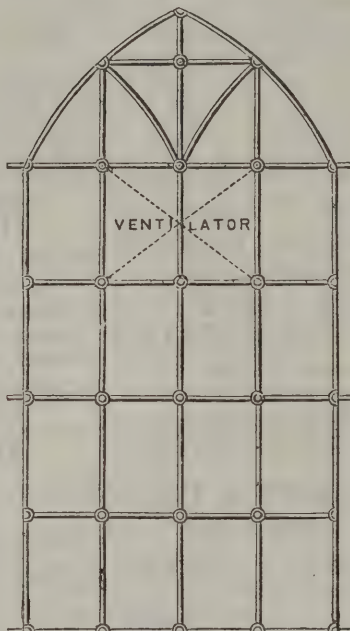
PRICES UPON APPLICATION.



CABLE LIGHT.



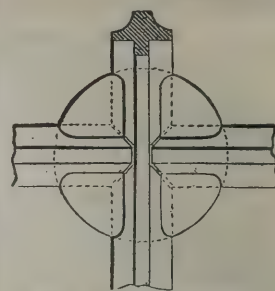
CLOSE BAR SASH (obviating use of Window Guards).



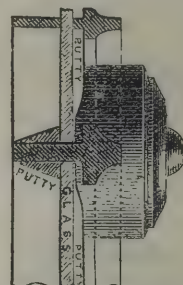
ORDINARY WAREHOUSE AND SCHOOL SASHES.



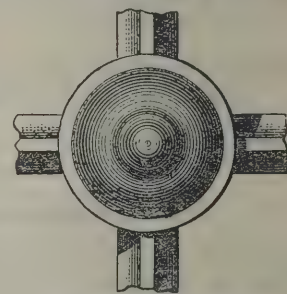
VENTILATOR



Back view of Boss, full size.



Section through Boss, full size. These can be glazed flat, like ordinary wooden sashes, without the corners of the pane being chipped off.



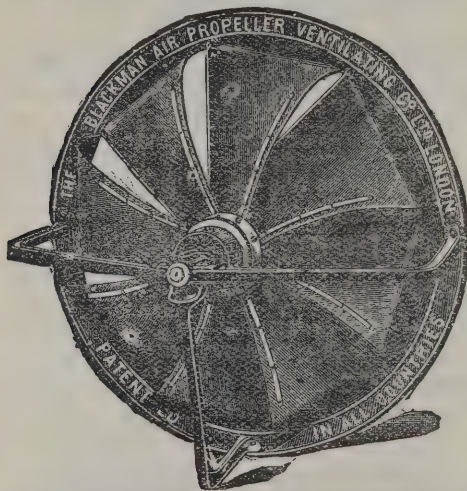
Front view of Boss, full size. Obscuring no appreciable light.

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CHELSEA WHARF, LOTTS ROAD, CHELSEA.

KENSAL GREEN, HARROW ROAD.  
VICTORIA WHARF, MORTLAKE, S.W.;  
BLACK HORSE LANE, RICHMOND and



# The Architect.

## THE DWELLINGS OF THE RICH IN FAULT.



It is with no intention of disparaging the popular cry for an improvement in the poor people's houses of our great metropolis, or of even diverting attention from it for a moment, that we ask leave to speak of the houses of our rich people in the same metropolis, as being a subject for corresponding complaint. The dwellings of the poor, if anything

practical can possibly be done for them, seem to be now in a fair way of being somehow or other sooner or later taken in hand by somebody, and we are quite prepared to do our own humble part, as we have already done, in discussing the matter with our readers as occasion may offer; but at the same time, seeing that the public mind is thus seriously engaged in the consideration of home comforts and discomforts in one direction, we hold ourselves fully entitled to take an inquiring glance at them in another.

It is as well to explain at once that we do not propose to go over the familiar ground of sanitary appliances; we will let the reader suppose a rich man's house to be, not only as old GEORGE ROBINS put the case in one of his famous advertisements, "an earthly paradise with a water-closet on every floor," but very much as Mr. E. C. ROBINS and his colleagues of our own day would have it, so thoroughly well drained that the owner might, in the words of an enthusiastic foreman, "in a manner of speaking, eat their dinner off the apparatus." In a word, after Dr. CORFIELD and Mr. ROGERS FIELD have completed all that their utmost ingenuity can accomplish, it is well known that DIVES still is not happy in the materialities of his home in Belgravia, any more than is LAZARUS in the Seven Dials.

Of all the "demons" which, as some good people accustom themselves to say, are at the bottom of bricks and mortar, perhaps the worst is the insatiably greedy demon of ground-rent. The peculiarly mischievous function of this tempter of mankind as a building animal is all the more mischievous because it is a strictly simple mathematical function. So long as two and two make four (so runs the insidious argument), it cannot be denied that it is the interest of the landowner to put as many houses upon his land as the market will allow—in other words, as the public will consent to live in, to lend upon, and to purchase. The ground that is occupied by the houses is worth very much more money than that which is only occupied by the gardens; and if this philosophy is so indisputable as it is in respect of the humble tenements of the poor, whose ground-rents are small, *à fortiori* must it be so in the case of the fine mansions of the rich—or, let us say, the "desirable residences" of the well-to-do—whose ground-rents are large.

One house is so like another throughout the interminable ranges of our West-end Streets, Roads, Hills, Vales, Gardens, Squares, Terraces, Places, and all the rest, that a very brief description will answer for the whole. In front of the house is the dirty, noisy, public thoroughfare, and at the back either a lead flat over the kitchen, or a stuffy back yard, humorously called in the Building Act an "open space," of the regulation size of 100 square feet or as little more as can be. The prospect or view from all the front rooms alike extends over the width of the roadway, and terminates generally in the front rooms of the houses opposite. The prospect from the back rooms extends over a double line of back-yards, and again terminates in the back rooms of a row of other houses. The air at the front comes off the road, and at the back off the yards.

The interior of such a house is, in its degree, somewhat tightly packed with elegant and costly furniture; and, as England is growing richer every day, the standards of elegance and cost are every day growing higher. In some instances the sooty atmosphere of the town causes an aspect of dinginess and a condition of dust to pervade the house as a permanent institution; in others there is produced (at no inconsiderable cost, by the way, in one form or another) an appearance of comparative freshness and cleanliness; it may be said,

however, that the abodes of dinginess and dust are in the majority.

The inmates during the day are chiefly more or less elegant women, frequently very elegant indeed in even the less appropriate interiors; at the door in the afternoon stand well-appointed equipages; in the evening there is unbounded family comfort, and from time to time most handsome hospitality. And it is not too much to say that not infrequently, when the fine ladies of such an establishment read in their morning papers of "a day in the country" having been provided for some ragged school, or perhaps see from their windows half-a-dozen pleasure vans conveying the delirious little people on such a godsend expedition, they cannot help thinking—as the duchess's lap-dog would have given its ears to be a street-dog for a single hour—that a day in the country a little earlier than the middle of August would be a godsend indeed for many of the dwellers in their stately quarter. For ten months in the year continuously are they shut up in a dull and stuffy house, with nothing in front but a more or less dirty or dusty street, traversed chiefly by tradesmen's carts and cabs, and resounding with barrel-organs, and with nothing in the rear but a wretched little yard, to look out upon which, however, from the "back drawing-room," ignoring as much as possible the neighbours' bedroom windows, is at least, if only by contrast, peace and repose. And when we remember that such a house stands at a rent of so many hundred pounds a year—in fact, from two hundred to fifteen—it may surely be said that its surroundings are out of character with its pretensions. What is more, it is plain that no amount of sanitation, or embellishment, or elegance, or other liberality of living within can in any degree make up for the entirely unladylike and ungentlemanlike character of that which is external.

It is obviously the greed of ground-rent that has brought all this about—a much less excusable greed of ground-rent, moreover, than that which drives away the poor from their slums—and although it is pleasant to observe in some quarters of the expanding suburbs that a little more space is being allowed in one way and another for air and greenery, yet it is almost more unpleasant to see in too many other localities that the crowding of houses of a good class for the sake of ground-rent is still carried on as defiantly as ever.

What is to be done for these rich people it is almost as hard to tell as to devise a cure for the overcrowding of the poor in the squalid alleys which are now so bitterly complained of. But, unless something can be done, however little, we are simply spreading all round London an ever-widening jungle of housebuilding, which, the wider it grows, the more unamiable it must be. Let us at least propose one thing. No architect who properly appreciates the principles of domestic comfort will hesitate to accept it as a rule that every good house ought to have its *open-air space*—just as much as its drawing-room—a "lung" all its own, however limited in dimensions, by means of which its inmates may, as their individual habits go, with head either covered or uncovered, saunter for an hour, or smoke a cigar, or lounge over a book, or sit at needlework, or whatever else; in short, amongst the "apartments" of the house there ought to be one on the open outside, in which to breathe the unsophisticated air of heaven. Whether in summer or in winter, in fair weather or foul, to be able to "put one's nose out of doors," as the vernacular cogently expresses the case, is a privilege that can never be unwelcome, and, one would think, can scarcely be dispensed with.

The ideal which we have in the mind's eye for every dwelling-house of good class in London comprehends in this respect a certain extent of open court in the rear—not necessarily larger than a large room—towards which the back wall of the house shall present a pleasing design, and the back door a sufficiently stately access. It may be paved with a pleasing pattern of tiles. The enclosing walls may be similarly covered. Privacy, at least on the ground level, may be complete enough. Shrubs and flowers may be disposed in vases. A basin for gold fish may occupy the centre; perhaps, when a constant supply of water comes, a small fountain may play. Seats, according to taste, may be placed where desired. A little summer-house may occupy some proper position; or perhaps an awning, perhaps a hammock, may serve the usual purposes. Whether an occasional tree might or might not be admissible is only a question of cleanliness; for, obviously, it is cleanliness that would be the chief consideration. In this outdoor adjunct, as we imagine it, kept as scrupulously clean as the drawing-room, we see no reason why the finest



of fine ladies and the daintiest of children ought not to be able to enjoy themselves freely—as freely at least as the atmospheric conditions of the island and the town permit, and more than this we cannot of course pretend to aim at. Until something of this kind becomes common in London and other large towns, the dwellings of the rich, we say, are, in their degree, almost as much in fault as those of the poor.

### ART IN CHALDEA AND ASSYRIA.\*

OUR readers know that in the Louvre the hall of Assyrian antiquities stands opposite, and at some distance from, the hall of Egyptian antiquities. The arrangement may have been made without any thought of the relation between the two departments of art, but nevertheless it is suggestive of their position if judged by a common standard. If we compare the representations of men and animals by Egyptian and Assyrian artists, we can hardly fail to observe the great difference in the physique. In Egypt the men and women would appear to have been rather slim, and the contours of the figures suggest muscles that are more fitted for certain kinds of activity than for strength. The domestic animals would not gain prizes at an English cattle show. But when we turn to Assyrian remains, we have figures in which the muscles are abnormally developed. No matter whether it is a warrior, a horse, a lion, or a bull, the vigour which comes from powerful thews and sinews seems to be the quality which the artist was most ambitious to express. The muscles are so much alike in the figures that they might almost be changed from one animal to another, or from a man to an animal, without entailing loss of character. In other countries painters and sculptors were allowed to follow their natural instincts, and seek for beauty of form and line; but in Assyria it was strength which was deified. There it was not a mere figure of speech to say a king was as brave as a lion or as strong as a bull; it was also made palpable in the hardest stone that he possessed leonine or taurine qualities.

MILTON may be said to have described the history, as well as the art, of Assyria, when speaking of mere strength he said it was "vast, unwieldy, burthensome, proudly secure, yet liable to fall." At one time Nineveh, the capital, was so magnificent that the descriptions of it were supposed to have been imaginative, until the discoveries of Sir A. H. LAYARD and M. BOTTA demonstrated that ancient traditions are not always erroneous. The sculpture is suggestive of massive structures that, like Egyptian temples, would outlast many generations. But in two or three hundred years the city, that according to JONAH would take a three days' journey to encompass, was completely obliterated. XENOPHON passed over it with his Greek companions, but was unable to recognise its position. The influence of Assyria on the history of art was no less forgotten, and it was reserved for our own time to discuss the relationship between Assyrian, Greek, and Western art. Another subject is allied with the latter, and that is from whence did Assyria obtain its art? MM. PERROT and CHIPIEZ, who have undertaken the laborious task of writing an universal history of art, have brought out that portion of it which relates to art in Chaldea and Assyria. It will be remembered that their history of Egyptian art lately appeared, and the new portion is on the same plan. Painting, sculpture, and architecture are considered, and, as far as is practicable, whatever is stated is founded upon existing remains. Sir FREDERICK LEIGHTON recommended the work to the students of the Royal Academy, on Monday evening, and it is no less adapted to a much larger body of readers.

The sculptures that formed a part of Assyrian palaces are, as we know from the remains in the British Museum and the Louvre, most massive in style. It might be assumed that the remainder of the work in those buildings corresponded with them. There seems to be no doubt that the walls were of great thickness, and that an extensive area was enclosed by them; but whatever interpretation we may put upon the remains or on the views of buildings shown in the reliefs, it is impossible to produce a restoration that is in perfect keeping with the sculpture. In the first place, sun-dried brick (which was used in the walls), although covered with slabs or stucco, is not so

worthy a material as the fine stone of the figures, and is, moreover, limited in its capabilities. It must have been as difficult to give dignity to building made of those bricks as to a modern concrete house. The upper parts of the buildings are said to have been constructed of timber, and consequently we may assume that they were light rather than massive, and they may have had some analogy with what is seen in Persia. In Egypt there was also a contrast between the sculpture, the painting and the building, but in another way, for the figures, although they may be large in size are not large in style, while the buildings have the grandeur and severity of mountain forms.

The first question that arises is why was not stone used for the walls as well as for the sculpture, so as to impart greater dignity to the buildings? M. CHIPIEZ has to admit that it is difficult to understand the neglect of stone. His explanation is one that has been used in connection with many Asiatic and African works. The labour that was available was of an unskilled kind. It was not equal to undertaking works of masonry, but after a few weeks in training the most stupid of captives would be able to knead and mould clay for walls. For the arches and vaults masons and bricklayers were needed, "but with these exceptions the whole work could be confided to the first comers, to those armies of captives whom we see on the bas-reliefs, labouring in chained gangs like convicts." Then, as now, architects were compelled to accept expediency as a guide. As M. CHIPIEZ says: "They did not dare to rouse the displeasure of masters who disliked to wait; they preferred rather to sacrifice the honour and glory to be won by the erection of solid and picturesque buildings than to use the slowly-worked materials in which alone they could be carried out." It is needless to say that this character of the Assyrian architects is imaginative, but it will suggest the difficulty of discovering an explanation for the practice of erecting houses of clay in a country where stone was within reach. In Chaldea there were no quarries of stone, and the use of brick was accordingly imperative, but there was a trade in metal and plates of bronze, and sometimes even more expensive metals were employed to conceal the meanness of the material in the walls.

Architecture which has to depend upon the use of clay and timber is deprived of opportunities for displaying grandeur in treatment or constructive skill. The town that is seen on the slab found at Kouyundjik is not unlike those which are printed on the lids of boxes of wooden bricks for children's use. The wall of the fortification is apparently strengthened by counter-forts, which are but a short distance apart, and are crowned with a crenellated battlement. It is remarkable that the wall appears to have had a vertical face, instead of being "battered," and this peculiarity is adhered to in the restorations, although the height is often very great. In work of this kind the utmost effort would be the construction of an arch and a vault, and the arch is introduced with a liberality that is almost Roman:—

The vault was supreme in certain parts of the building. Its use was there so constant as to have almost the character of an unvarying law. Every palace was pierced in its substructure by drains that carried the rain-water and the general waste from the large population by which it was inhabited down into the neighbouring river, and nearly all those drains were vaulted. And it must not be supposed that the architect deliberately hid his vaults and arches, or that he only used them in those parts of his buildings where they were concealed and lost in their surroundings: they occur also upon the most careful and elaborate façades. The gates of cities, of palaces, and temples—of most buildings, in fact, that have any monumental character—are crowned by an arch, the curve of which is accentuated by a brilliantly-coloured soffit. This arch is continued as a barrel vault for the whole length of the passage leading into the interior, and these passages are sometimes very long. Vaults would also, in all probability, have been found over those narrow chambers that are so numerous in Assyrian palaces were it not for the ruin that has overtaken their superstructures. Finally, certain square rooms have been discovered which must have been covered with vaults in the shape of more or less flattened domes.

The Assyrian palaces, as we have said, covered a great deal of ground, but the section of SARGON's palace is more suggestive of an embankment of a reservoir, or a bastion of a fortification, than of a building. There are different levels, and if the parts are connected by arches and vaults, there is an approximation towards the complete structure, according to the French theory. It has also been supposed that the upper

\* *A History of Art in Chaldea and Assyria.* By Georges Perrot and Charles Chipiez. Translated by Walter Armstrong, B.A. Chapman & Hall, Limited.



surface of the embankments was sometimes levelled and used as a place of assembly. A remarkable example of one has been devised by M. CHIEPIEZ. It has a pavilion, which is supported by four masts or columns, and near it are standards which correspond with those shown on the Balawat strips of bronze in the British Museum. The column is of importance in connection with Assyrian architecture, and it had a symbolic as well as a constructive use. The volutes seen on some may have been the originals of those which mark the Ionic order, and the base was sometimes supported by a figure of an animal.

The unscientific character of Assyrian construction is seen in the placing of the sculptured slabs. Nothing was done to secure the connection between a slab and its backing of clay. We are told that "no trace of any tie is to be found. A 'tooth' has been given to the inner faces of the slabs by seaming them in every direction with the chisel, and perhaps some plastic substance may at the last moment have been introduced between them and the soft clay, but no trace of any other contrivance for keeping the two materials together has been found."

It is evident that, with such a system of construction, the interior of the palaces must have been rather limited in size. Arches and vaults of large span were impracticable with baked clay. The rooms that are seen in the illustrations by MM. PERROT and CHIEPIEZ are accordingly small. It will be remembered that Mr. FERGUSON got out of the difficulty by supposing that the upper part of a palace was constructed of timber. His Nineveh Court at the Crystal Palace, which was a remarkable work, was designed on that system, and it certainly appeared to have more of an Assyrian or Eastern character than the buildings in the book before us. The question, however, is whether recent excavations may not have given us more information, and in France it would be said that MM. PERROT and CHIEPIEZ are nearer the truth. The subject is discussed with great fairness by those authors, and we refer our readers to their book as a compendium of all that is known on Assyrian art.

### PARIS NOTES.

THE two immense paintings representing, one, *Napoleon I. giving the order to promulgate the Commercial Code*; the other, *Napoleon III. and the Empress attending the Inauguration of the Tribunal of Commerce*, which are to be removed from the Chamber of Audience at the Tribunal of Commerce, by order of the Municipal Council, will be rolled up and relegated to the store-rooms of the city in the Boulevard Morland. They will there keep company with many other canvases in exile from political causes—a portrait of Louis XV., one of Napoleon I., by Lefèvre; several of Louis XVIII., two of Charles X., and many of Louis-Philippe. There are only two of Napoleon III., Flandrin's magnificent painting of the last emperor having been pierced and destroyed by bayonet thrusts during the Commune.

Important decorative works have lately been executed at the Château de Chantilly, the seat of the Duc d'Aumale. Some fine carved wood screens, of the sixteenth century, have been placed in the chapel, near the altar by Germain Pilon; and a new balustrade, said to be a masterpiece of ornamental ironwork, has been added to the grand staircase.

The Central Society of French Architects has just elected the following officers for the coming year: President, M. Questel, member of the Institute; vice-presidents, MM. A. Normand and de Joly; chief secretary, M. Lucien Etienne; assistant secretary, M. Paul Wallon; editing secretary, M. Eug. Monnier; keeper of the archives, M. Raulin; treasurer, M. Feydeau; auditors, MM. Bailly, member of the Institute, Uchard, and J. Hénard.

The new managing committee of the Société Libre des Artistes Français met on Monday last, at the studio of M. René de Gatines, to elect its officers, with the following result: President, M. Dalou; vice-presidents, MM. Humbert and Saint-Pierre; general secretary, M. René de Gatines; treasurer, M. Polack; secretaries for painting and engraving section, MM. Schmitt and Langlois; secretaries for sculpture and architecture, MM. Brisseau and Thabard.

During the debate last week in the Chamber of Deputies on the Fine Arts Budget, M. Marius Poulet, one of the members for the Department of the Var, moved an amendment to reduce the

grant for historical monuments by 400,000 frs. He stated that the section provided for the repair of fifty-two churches at a cost of nearly 1,000,000 frs., and objected to the outlay on the ground that the buildings were almost all of the same style of architecture. He therefore proposed to reduce the grant by one-half, urging, moreover, that the work was negligently performed and the control inadequate, as the architects acted at the same time as inspectors. The reporter replied that it was creditable to France that she should have preserved the historical monuments of religious art, and the amendment was negatived by 384 to 79 votes. Some discussion occurred as to the advisability of applying the site of the old Cour des Comptes to the purposes of a museum similar to the one at South Kensington, the Government promising to give the subject special study. The Gobelins Factory will have to wait another year for the 300,000 frs. required for repairs, although some of the workshops are so damp that the tapestries are injured on the looms. The Budget Committee preferred to carry out the construction of the Conservatoire des Arts et Métiers, and the House confirmed its recommendation.

Visitors to the old Hôtel de Ville may remember two fine bronze statues, one of Louis XIV., by Coysevox, the other of François I., by Cavalier, which ornamented the peristyle of the Cour Louis XIV. They escaped the destruction of the building by fire, with very slight damage, which may easily be repaired. The statues were lodged provisionally in the old Salle Saint-Jean, but have now been sent to the founders to be restored, after which they will be erected in one of the courts of the new Hôtel de Ville.

The Salles des Caryatides at the Louvre, which had been closed for nearly a year, has been completely restored and is again open to the public.

M. Dalou's bas-relief, *Mirabeau aux Etats-Généraux*, is to be cast in wax for the Chamber of Deputies, by M. Eugène Gonon, at a cost of 25,000 frs.

The exhibition of Sellier's works at the Ecole des Beaux-Arts opened on Monday last. The artist, who was a native of Nancy, carried off the Premier Grand Prix de Rome in 1857, the subject for the year being *The Raising of Lazarus*. Among his competitors on that occasion were Hector Leroux and Léon Bonnat, who each obtained a second Grand Prix; and Benjamin Ulmann, an Honourable Mention. He was placed *hors concours* in the Salon exhibitions after 1865, and in that year received a medal, to which a "second class" was added in 1872. While great as a draughtsman, Sellier is also one of the few painters of the modern school who have approached the nearest to the magical effects of Rembrandt's wondrous chiaro-oscuro.

The board of directors of the Musée des Arts Décoratifs is fitting up a laboratory for the reproduction, by means of photography, of the collections belonging to the museum, as well as other works of art selected in public exhibitions or belonging to private owners. Sets of these photographs will be placed at the disposal of workers in the various branches of art industry and of pupils attending schools of design.

Mdlle. Rosa Bonheur has for some time past been in a very precarious state of health. She was obliged to pass the last winter in the South of France, but has since been residing at her villa near Fontainebleau. During the past few weeks she has been gradually growing so much worse that Mdlle. Bonheur has been to Paris in order to have the attendance of the leading physicians. We are happy to learn that this step has already been rewarded with some success, a considerable improvement having manifested itself in her condition during the past day or two.

The death is announced of M. Ulysse Butin, the painter, at the early age of forty-six. His principal works were scenes of seafaring life, and in this line he had gained a great reputation.

The apse of Notre-Dame Cathedral is now under repair, several of the turrets having fallen into a state of dilapidation under the combined attacks of time and weather. At the same time the roof is being releaded, and the grand entrance restored.

**Mr. Albert F. Bellows**, one of the best known of American artists, has recently died at Auburndale, Massachusetts. Mr. Bellows was born at Milford in 1830, and studied art first at Boston, and subsequently in Paris and Antwerp. He was one of the early members of the American Society of Painters in Water Colours, and in 1859 he was elected an Associate of the National Academy, and two years later made an Academician.



ART IN RELATION TO TIME, PLACE,  
AND RACE.\*

BY SIR FREDERICK LEIGHTON, P.R.A.

STUDENTS of the Royal Academy,—The subject on which two years ago, on a like occasion, I addressed you from this chair was, you may remember, the relation in which art stands to morality and to religion. I shall ask you this evening to consider with me a subject, not, I think, less interesting—namely, the relation of artistic production to the conditions of time and place under which it is evolved and to the characteristics of the races to which it is due. Do not be unduly alarmed at such a prospect; in the very vastness of the subject is your greatest safety; for it is needless to say that the limits of our time, were there no other hindrance, will not suffer me to deal with more than a fragment of so wide a topic, or to present to you that fragment in other than baldest outline. It will be enough if, by putting before you a few suggestive facts, I am able to quicken your interest in and to lead you to explore for yourselves a very fascinating and far-reaching field of thought. This is my sole and sufficient aim to-night.

*The "Family Air" in Art.*

If, in your study of the works of painting or of sculpture to which you have had access either in permanent galleries or in temporary exhibitions, or of the numberless architectural works at home and abroad which photography brings within the reach of those to whom it is not given to travel, you have passed from the examination of individual examples to a more comprehensive consideration of the broad groups into which they fall, according to the countries which have produced them, and to the period of their production, you cannot fail to have noticed the definite and distinctive physiognomy—the family air, as it has been well called, which marks these several groups; and if, pursuing further this train of thought, you have endeavoured to penetrate the nature of this distinctive physiognomy, you have perhaps been led to note the harmony which, in each case, exists between it and the atmosphere, mental and moral, within which it took shape. This will have become equally clear to you whether you have compared, one with the other, the art of different countries or the art of different epochs. So, for instance, in passing from a work by Rubens to one by Velasquez, the opulent splendour of the one and the concentrated gravity of the other will have, may be, brought before you more vividly than could many words the deeply contrasted characteristics of national temper by which Nature had divided two peoples long united in unnatural bonds of political union—Spain and Flanders. Or, again, if, in the comparison of the ogival architecture of England with that of France or of Germany, you have discovered in each school the expression of distinct national characteristics, you will have felt not less clearly in the contrast between the solemn and mystic gloom of a Northern cathedral and the radiant serenity of a perfect Grecian temple the antithesis which exists between the Mediæval and the Hellenic world. And no doubt the sense will have grown upon you that this harmony between the work and its surroundings is not fortuitous, but rather that art is an organism fed and formed by the same forces which shape the current of the general spiritual life of which it is, indeed, but one among many forms of expression.

You may have observed, in the next place, how vitally one of the arts especially, architecture, is affected by the physical conditions of the country in which it is practised; and, lastly, in following the stream of art to its remoter sources, you have, perhaps, been struck with its continuity and with the part played in its evolution by inheritance or by example. From land to land, from age to age, you may have traced through their various vicissitudes certain recurring ideas and forms; nay, if you have descended from the higher regions of art to the humbler sphere of design which is called industrial, you will have found in more than one commonplace of contemporary decoration devices conceived dim ages ago in the lands of the Pharaohs, or on the plains of Shinar. So, for one instance only, the not too formidable animal whose toothless and trunkless head seems to "roar ye an't were any nightingale" from the back of your armchair, or on the handle of your teapot, and whose feet so fitly end the legs of your sofa or of your sideboard, has its prototype in carvings inspired on the quick in far Assyrian days, and is the last transmitted counterfeit of lions that once writhed on the spears, or yawned round the golden throne of a Sargon or a Sennacherib.

*Mystery of the Æsthetic Principle.*

Well, it is on these formative influences of surroundings in time and place, and of inheritance or example, that I wish to say a few words to you to-night—mere suggestions, I repeat, of an outline which you may, if you so care, fill in at your leisure for yourselves. But here a word of caution is necessary: the further you penetrate into this subject the more, I make no doubt, will you feel its fascination; but with this fascination will come also the risk of overrating or misinterpreting the bearing of each new fact that seems to throw light upon your investigations—the danger will

arise of unconsciously fitting fact into theory, instead of testing theory by fact, and of forgetting, in the neatness of a chain of reasoning wrought from materials too partially selected, the darkness which shrouds, for all our seeking, the inmost springs of the æsthetic life in nations and in men. We must content ourselves, as we watch that life in its intermittent flow, with noting the affluents which feed it, the banks which mould its current, and the elements which tinge its waters, confessing that the initial forces which determine the hour and the place of its birth, and the times of its fulness and of its failing, remain indeed a mystery of which the key is still withheld from us.

*Main Influences.*

The main influences which determine the bent and growth of art are these: First, and primarily, the temper and genius of a race; then the social and intellectual state of a community or nation at a given moment; thirdly, example, whether by unbroken transmission of inheritance, by the resuscitation of a tradition, or through a stimulating contact with other nations; and, lastly, the influence, partly moral and partly material, of surrounding physical conditions. These several agencies overlap, no doubt, as well as co-operate; it is, however, if not strictly philosophical, convenient for our purpose to speak of them as separate. Let us now endeavour to see them at work.

*Egyptian Art in relation to the People.*

It is evident that of these various influences the third—namely, example by contact or inheritance—will be less and less perceptible as we ascend the stream of time. As we leave ever further behind us the complex life of modern nations, with their unceasing interaction one on the other, and that burden of intellectual inheritance which is not always an unmixed blessing to their art, we see the problem of growth becoming more simple, till we reach, at last, a period in which external impulses are all but inappreciable, and in which art, shaping itself closely on the wants and the conditions of the land and the people from which it springs, is the faithful and unalloyed expression of the genius of that people and the resources of that land. Such a land we find on the banks of the Nile, and such a period in the unrecorded dawn of Egyptian civilisation. Here, at least, the problem of evolution is reduced to the simplest form known to us west of the cradle of our race, though not to the simplest form conceivable; for although one branch of Egyptian art—sculpture—had reached a very high, perhaps its highest, level between 3,000 and 4,000, or, according to Mariette and Maspero, between 4,000 and 5,000 years before the Christian era, the Egyptians were not, it is believed, indigenous on the Nile. For our present purposes, however, they may be considered practically a primitive race. What manner of people were they? They were a people endowed with brilliant gifts, and of whom a prominent characteristic was their piety. "The Egyptians are religious," says Herodotus, "far beyond any other race of men." Piety was printed on all their works. They believed in an after life, and on that after life their thoughts were chiefly bent. They traced to the heavens the origin of their royal throne, and believed that in a far, unchronicled past the gods themselves had ruled within their land; the right hand of the immortals was extended over them in protection; their pontiff kings visibly represented the godhead upon earth, and at their death were in their turn taken up into the heavenly ranks. They were a race which during long centuries—those early centuries in which its arts took shape and ripened—grew up in unchallenged peace to strength and conscious greatness, knowing as yet no rivals, drinking in daily the deepening sense of a security unassailable and immemorial. Visibly favoured in a climate beyond example steadfast and serene, and in a soil lavish of every gift, they were above all made confident in the sight generation after generation of the ever-renewed blessing of the great stream in whose waters that soil was each autumn born anew; and so to the sense of abidingness would add itself that of unexhausted wealth and plenty. I said that they were pre-eminently pious—dwelling constantly in thought on the life of which the gate is death. We need not enter here into their complex creed concerning the soul and the intelligence, the body and its double; it is enough for us to note that in their belief a material form was needed after death as a home and resting-place, until the day of doom, for that surviving "double"—that eidolon—which was an incorporeal counterpart of the body. To furnish this tenement for the double was, therefore, a sacred duty, and it was accordingly provided in two ways—first, by embalmment of the corpse itself, and, further, for the event of injury to the mummy, by the manufacture of stone or wooden counterfeits made in its exact image, and for greater safety these were frequently very numerous. Such, then, being the mental attitude and such the custom of a race with strong plastic and building instincts, what sort of art should we look for in it? Should we not look for an art in which the temples of the gods and the abodes of the dead were the most salient feature? And should we not further expect of such a people that whatever connected itself with the glorification of those gods, or with the exaltation of earthly rulers scarcely less divine, or with the service of the departed, would be the inspiring motive of their graphic and plastic art, as well as of their architectural production? And this art being an entirely spontaneous and sincere expression of the national temper, should it not convey to

\* An address delivered on Monday at Burlington House to the students of the Royal Academy.



us a sense of strength, of dignity, of stability, and of repose? And would not the consciousness of unlimited resources find expression in a tendency to the excessive in size? Well, these are precisely the characteristics which we never fail to find in the monuments of Egypt, and in so much of her plastic art as is not purely domestic in character and descriptive of private life. Those whose fortune it has been to stand by the base of the Great Pyramid of Khoofoo and look up at its far summit flaming in the violet sky, or to gaze on the wreck of that solemn watcher of the rising sun, the giant Sphinx of Gizeh, erect still after sixty centuries in the desert's slowly-rising tide, or who have rested in the shade of the huge shafts which tell of the pomp and splendour of hundred-gated Thebes, must, I think, have received impressions of majesty and of enduring strength which will not fade within their memory.

#### *Egyptian Sculpture.*

But if the general character of these monuments bears the impress of the moral temper of the Egyptian people, we shall find a special requirement of their faith exercising a direct and vital effect on the development of their sculpture and of their painting; in the case of the former, first for good, and afterwards, indirectly, for mischief. I mean the duty, which as I have told you they held sacred, of supplementing the embalmed corpses in the tombs with images of the deceased in stone or wood. Out of this duty arose necessarily a vast activity in the field of sculpture; but the object of the artist was to produce, I said, in these images an exact counterfeit of the outward form and features of the departed, in order that the second life—the life in the shadow of the tomb—might mimic as faithfully as possible the old life in the light of day; and the result was, as might be expected, a remarkable development of individualisation in treatment of form and figure; in fact, a vigorous and uncompromising school of portraiture. This view of the causes which influenced Egyptian sculpture in its origin is very lucidly set forth in the admirable work of Messrs. Perrot and Chipiez, which I commend to your study, and in which you will find it supported by a series of most excellent illustrations. While, however, so large a demand for works of sculpture had a very stimulating, and, at first, a very wholesome effect on plastic art, the very extent of that demand became eventually a source of harm, and we may safely attribute to it some not small share of the stagnation and eventual decline of this branch of art on the banks of the Nile. For in exact proportion to the necessity for rapid and almost unlimited production would the obstacles to thoughtful treatment and a close study of nature increase; the sculptor would fatally tend to become a mere manufacturer and purveyor, and in the speed to which he was compelled life and character would more and more surely disappear from his work. Be this as it may, we see in Egypt this strange thing—that the earliest efforts of sculpture which have come down to us are in general the best. Certain wooden panels, for instance, carved in low relief, which are preserved at Boulaq, and which display a delicacy of workmanship and a spontaneity of treatment seldom equalled in Egyptian art, are believed by M. Maspero, under whose guidance I had the good fortune to see them, to date back to the third dynasty—that is to say, to over forty centuries before the Christian era. And the qualities which distinguish the most perfect phase of this art are precisely a subtler perception of individuality, and a more unreserved obedience to Nature, than we see at any subsequent period. Our acquaintance with this epoch of Egyptian art is of very recent date, and it had been till quite lately much the custom to take an exaggerated view of the stagnancy of Egyptian sculpture to which I just now alluded; a truer appreciation both of the achievements of that art, and of the phases through which it passed, is now beginning to prevail; meanwhile we must, I think, be on our guard lest we now fall into an opposite error, ignoring unduly the limitations from which the sculpture of Egypt never freed itself, and forgetting that if in fifty times a hundred years it underwent marked and considerable modifications, those changes did not bring improvement with them after a certain early period. Of this arrested growth the causes must in great part remain obscure; the explanation which I have suggested, and of which I would not overrate the bearing, applies only to funereal art; and though no doubt the whole current of plastic production would be affected by the vicissitudes of its main affluent, we must look for other causes to account for the strange and pulseless monotony which we see in the treatment of the statues of the gods. One of these M. Perrot is inclined to seek in the necessity imposed on the artist of representing those gods as a monstrous compound of man and beast—a necessity which shut him out from any inspiring ideal. Much, again, of the absence of action in Egyptian statues, and of the empty smoothness which so often characterises their modelling, he attributes to the extreme hardness of the material in which they are habitually wrought, and which, while lending itself to a high polish, was extremely difficult to carve. To these causes we may add the absence of any fecundating contact with other races. But behind and beyond them all, we must recognise as the primary agent a certain peculiarity and inertness of the race, a narrow but tenacious spirit of which, whatever may be its sources, we find the perfect counterpart only in the great Turanian empire of the East—the not less ancient land of China.

#### *Egyptian Painting.*

I could have wished to say, also, in this place a word on the harmony which exists between Egyptian building and the scenery in which it is set, but for this time leaves me no leisure; I have yet, before passing to other lands, to glance briefly at Egyptian painting. Of this our knowledge is drawn wholly from the tombs. Like sculpture, it owed its chief impulse to the views of the Egyptians in regard to a suspended life within the grave; for not only were meat and drink laid for their sustenance before the dead, but just as to the mummy were added supplementary semblances of the body, so also was the painted semblance of food placed about it in its long abode; nay, more, as the ghostly inmate could no longer wander forth into the world, the world was piously brought in effigy to him in the tomb, and on the walls around him he saw unfolded each scene of daily and domestic life, in the sight of which he might once more seem to himself to sow and to reap, to count his hoarded gain, to carouse, and to rehearse in all things his vanished earthly days. Here, more than elsewhere, we find the Egyptian artist untrammelled by material, and we are accordingly struck with an increased vivacity of dramatic treatment and the greater freedom with which he handles the human form; here, too, we note a certain cheerful *bonhomie* which was a characteristic of the race. I have spoken of these designs as paintings, but they would be more accurately described as outlines filled in with colour; for throughout Egyptian art colour appears solely as a flat tint. It is a prevalent opinion that the Egyptians were colourists, skilful harmonisers, that is, of subtle tints. In this opinion, though not unmindful of the harmonious effect of some of their enamels in which the original tints are still preserved, I find some difficulty in concurring; faded and bleached by the sun, the coloured hieroglyphs which still enliven some of their buildings are no doubt very delightful in their play of tones, and to many paintings on papyri or on mummy cases decay or golden resins have given the delicacy of fresco or a glow as of mosaics; but the sight of well-preserved paintings of comparatively recent discovery has left grave doubts in my mind in regard to the colouristic aptitudes of the people which produced them. This, however, is worthy of notice—that we see in Egyptian painting the first use of that combination of green and blue which was to be the dominant note of so much that is most beautiful in Eastern coloured decoration.

#### *The Semites and Art.*

Next to Egyptian art in order of antiquity and closely connected with it, is that of the two great Semitic empires which had their seat by the waters of the Tigris and the Euphrates. To these I now turn. And here a perplexity awaits us. We have learned to think of the Semitic race as marked out scarcely more by its monotheism than by its lack of gift for the plastic arts. Void of artistic impulse, the Jews, we know, saw in the Second Commandment not only a warning against idolatrous worship, but a distinct decree of the Almighty against the production of graven images even for purposes of teaching or of delight. Renan, in his "History of the Semitic Languages," says on this subject much that is suggestive and interesting. "The desert," he writes, "is monotheistic; sublime in its immense uniformity, it revealed to man the idea of the Infinite but not the sense of an incessant creative activity which more fertile regions breathed into other races." "Nature," he adds elsewhere of the Jew, "had little place in his thoughts"; and further on, "Music, the subjective art *par excellence*, is the only one he knew." It is to a brooding and introspective habit of mind that he attributes the absence in this race of any craving for plastic expression, which is, we know, in its essence a desire to recall sensations aroused by outward objects. Here, then, is our perplexity; for if, turning from the Jews, we look to their kindred Semites in their own ancestral Chaldea, we see them under skies as broad and in more unbroken plains, amid pursuits, too, originally similar, moulded to a temper wholly different; to them the wilderness was not monotheistic, to them the sky's unclouded span brought no lesson of one Lord, supreme and solitary; it led them rather to the complex science of the stars, and to that belief in their influence over the destinies of men which has played so great a part in the annals of mankind; and, finally, we see them evolving in due course an art full of power and of objective vitality, an art of which the fruitful seeds were to fall one day on the lap of Greece herself. These, I say, are perplexing facts, and show with what caution we must, even at this early stage of the world's history, handle the ethnological test. Their partial explanation we must, no doubt, seek in the fact that the Jews were of far more unmixed Semitic blood than were the Chaldeans and Assyrians, who are, when first we meet them, already blended with an Accadian—that is to say, a Turanian stock.

#### *Assyrian Art.*

Meanwhile, we shall not find on closer inspection that the landmarks of race have been as wholly removed as might at first sight seem; and the foremost sign of this is the complete absence among this Semitic folk, in Assyria at least, of the monumental tomb—the outward mark of the absorbing prominence of the subject of death in the Turanian mind; and we shall further find that, striking as are the achievements of the sculptors of Nineveh,



those artists did not practically get beyond the carving of flat surfaces, and that nothing in the shape of an Assyrian or Chaldean statue has come down to us for which any serious merit can be claimed. The more than summary sketchiness which is imposed upon me forbids my dealing separately with Chaldean and Assyrian art; it will suffice to say that if the fortune of war gave alternate supremacy to Babylon and to Nineveh the art of the two nations was practically one growth; we may note, too, that as power gravitated from the gentler Chaldean to his ruder brother in the north, the religious spirit of the former yielded to the warlike genius of the latter, and while what remains to us of the first Chaldean empire is of a religious character, the architecture of Assyria is mainly palatial and expressive of the power of a ruthless race of kings; for Assyria, in the days of its greatness, was as a vast camp spread about the throne of a fighting monarch, and the Assyrians, a breed of warriors fierce and without fear, casting down their enemies, in the words of Isaiah, "as a tempest of hail and a destroying storm." And the pride of splendour, too, was strong within them. Would you see an Assyrian king in all his love of luxury and in his lust of blood? Then look where Assurbanabal sits with his queen, carved on an alabaster slab now in the British Museum. Among the palm-trees of the royal gardens, his weapons laid aside, but at hand, he reclines on a sumptuous couch, curiously wrought, and spread with stuffs from the famous looms of Babylon; opposite to him, on a throne, sits the queen; each of them has taken from a dainty table, which divides them, a cup of wine, and is about to drink; the feast is spread in the chequered shadow of a vine, for the sun is fierce overhead, and attendants placed at each end of the couch strive with long fans to simulate a breeze; the birds seek refuge in the branches; minstrels are not wanting, and the sound of harps thrills through the summer stillness; over all a drowsy peace. And now look closer; on what is the great king gazing across the bubbles of his wine? Not at the golden date palms, not at the purple grapes, not at the simmering plain, not at the sky's blue tent, not even, I fear, on the features of the queen. His eye rests, in placid contemplation, upon an object hung full in view on a bough before him, the sweetest sight of all—a ghastly fruit plucked newly from its trunk—his enemy's hated head, dangling, dishonoured, upside down! With such a people, and with such a line of kings, what artistic expression shall we look to find? We shall look for an art masculine and somewhat truculent, in which the prowess of the sovereign in war and in the chase—for were not the sons of Nimrod great huntsmen before the Lord?—shall be the leading theme: official annals, so to speak, of high royal deeds. We shall expect no domestic subjects; none of the quaint idylls of homely life which the Egyptians loved even after they, too, had begun to blazon butchery on their walls; few scenes prompted by piety. And such is, in fact, the art we find; and the execution of it is strikingly expressive of its spirit, for the hand of the artist found in the yielding alabaster, in which he mainly worked, a fitting substance wherein to plough and hack the thews and sinews which he loved to mark with such uncompromising vigour.

#### *Influence of Materials in Assyrian Art.*

And here, in comparing the grim accentuation of these Assyrian sculptures with the vacant polish of so many images of Egyptian workmanship, in which the limbs remain engaged within the granite block, you will do well again to note the bearing of material on the development of art in early days. I alluded just now to the royal hunting pieces in the Assyrian sculptures. That these should be good was natural in a people passionately fond of sport; but it is not easy to account for the immeasurably greater dramatic insight here displayed in the representation of wild beasts than in the rendering of the human form. In all essentials I know nothing quite equal to the portrayal by Assyrian artists of lions maddened or struck down in the chase. Their lesser skill in the treatment of human beings has, indeed, been attributed to the fact that they never saw their subjects except closely draped from head to foot; but this explanation, though ingenious, seems to me wholly inadequate, and we must in this case, as in so many others, be content to wonder in doubt and ignorance. One word on Assyrian architecture in so far as it touches our subject of to-night. Stone, if not in great quantities, was accessible to the builders of Nineveh; nevertheless they built in brick, for their architecture, like all their art, had its origin in Chaldea—that is, in a country where there was no stone, but where, on the other hand, clay abounded for the making of bricks and tiles. But the broad and empty surfaces of their buildings, surfaces almost wholly unrelieved by mouldings—for this form of enrichment did not, with such a material, readily suggest itself in so early a stage of art—required profuse adornment to satisfy Assyrian love of splendour and to be worthy of Chaldean tradition. Here stone found its opportunity, and soon colossal monsters, human-headed, but limbed like a bull, and winged—types of strength and wisdom—took post at gateways and approaches, while long lines of sculptured frieze ran, level with the eye, along the interminable walls. To this enrichment of the ground-line of their palaces the use of stone by the Assyrians was limited; above this line another mode of adornment was chiefly used, namely, a casing of glazed and coloured tiles, wherein you see the origin of that marvellous decoration which to this day in the

same regions throws its enchantment over fields of wall-space hardly less flat and free from moulded features. For internal embellishment and for detached structural supports, Assyria had wood and metal, a combination, indeed, which lies at the origin of all decorated columnar forms. Of such piers or columns material evidence no longer exists, except it be in charred fragments; but other reasons beside structural requirements would suffice to convince us that they had existed. In the first place, as is acutely argued by Mr. Fergusson, in his most suggestive and valuable work on architecture, it is no doubt of these supports that we see the reproduction in stone in the wholly borrowed art of Persia; secondly, their use in tents and ædicles, and as a decorative feature in windows, practically involves their application to a more important function; and, lastly, the deep influence on Ionic art of this among many Assyrian forms implies in itself its large and general use; and thus this architectural feature, which attains its highest beauty of abstract form in the porch of the Erechtheum, has for its first rude ancestor a cedar pole and a curl or two of copper.

Two or three more points may be noted here in passing: the first is that astronomy determined the shape and colour of one type of Assyrian temples—temples which were also observatories. Their storeys were seven in number, the sacred seven; and each storey bore the colour proper to one of the heavenly spheres. Another is, that in Assyria we for the first time see the arch used as an important decorative and decorated feature. Another, that we first discover in an Assyrian bas-relief an instance of a new constructive feature—the gable roof.

#### *Early Greek Art.*

In Egypt and in the Mesopotamian kingdoms, we have seen two forms of art, akin in some respects, but nevertheless separate and individual, both bearing strongly the stamp of the race, the country, and the times which gave them to the world, both marked by a strange inertness and persistency. Let us now look, for a moment, and in conclusion, at an art in which whatever was best in them rose to a fuller and nobler life—an art which we can compare no longer to a broad and sluggish stream, but which is as the sudden upleaping of a living source, reflecting and scattering abroad the light of a new and a more joyous day; a spring at which men shall drink to the end of all days and not be sated; the art of Greece. Nothing that I am aware of in the history of the human intelligence is for a moment comparable to the dazzling swiftness of the ripening of Greek art in the fifth century before Christ; and we marvel at it the more from the contrast it presents to the secular torpors of the races from which it drew its alphabet. I fear, too, that when we have ascribed this lightning speed of growth to a peculiarly happy balance and interaction of various elements of race, and to not less favouring circumstances of place and time, we shall not have gone far on the road to understanding it, and we shall perhaps here more vividly than ever feel our ignorance of the mysterious affinities—the occult chemistry of nature, if I may so call it—through which certain racial ingredients produce in varying combinations results so strangely different. Nevertheless, it will not be without interest to apply for a moment to this evolution the same methods of inquiry which have guided us hitherto this evening.

#### *Ionians and Dorians.*

The earliest historic records of Greece are but recent as compared with those of Egypt or of Chaldea, and it is only in occasional glimpses that we discern the footprints of civilisation in this chosen land during the obscure centuries which preceded the Dorian invasion, or, indeed, as far as art is concerned, the era of the Olympiads. Looking back to the age in which we first descry them, we find the land occupied by a race which we call Pelasgic, and which seems to have held not only all the lands washed by the Ægean from Lydia to Cape Tænaron, but to have pushed round the head of the Adriatic and spread itself out over Italy. This race was, perhaps, the earliest wave poured by the Aryan tide from Asia into Europe; but it preceded the later immigrants into Greece by such an interval as to form a very distinct stock, and, whether or not by an assimilation with earlier occupants of the soil, they appear before us in the three lands with certain of the attributes of a Turanian people—that is to say, as mighty builders, and, notably, builders of tombs. They were followed on the scene by a purer Aryan race, which, descending from the Phrygian heights to settle first on the western skirts of Asia Minor, overflowed towards the fifteenth century in all directions, southward even to Egypt, but especially westward, by the islands, to Greece; there so blending with the Pelasgic stock that they soon learnt to boast themselves Autochthons. Lastly, another offshoot of the same family, after making its way across the Hellespont to settle in the Thessalian highlands, burst forth in the eleventh century and swept, conquering, over the land. These two races, akin in origin, and yet profoundly unlike, were known as the Ionian and Dorian peoples; and their rivalry is the history of Greece. Of the earlier Pelasgic or Pelasgo-Ionic race few, but important, vestiges are preserved to us, the most remarkable being sepulchral monuments, such as the tombs, or so-called treasure-houses, of Orchomenos and Mycenæ; walls, also, and gateways, of massive style and masonry, reveal them to us as a great building people; and in



all these remains we trace a distinct Assyrian influence, either due to the Ionians themselves or to Phœnician middlemen, or perhaps to both. With the rule of the Dorians a complete paralysis seems to have fallen on the artistic life of the country as far as architecture is concerned, and to have held it in abeyance for several centuries. Whether or not this lethargy is directly attributable to the genius of the dominant race—a race of soldiers and of law-givers, and averse to art—it is difficult to say; this much, however, is beyond doubt—that, although the Dorians made their own and gave their name to a style of architecture without a rival for dignity of chastened form, in the region in which their race and spirit were more than elsewhere seen pure and paramount—the Spartan State—the arts, if we except martial music, had absolutely no existence; and it is, therefore, the more difficult to evade the conviction, combated though it has been by weighty opinion, that the Doric style was not of Doric origin, but was, indeed, in great measure borrowed, about the days of Psammetik or earlier, from prototypes still seen at Karnak and at Beni-Hassan. However this may be, when Greece emerges at last into historic light we find her building art born, so to speak, anew; of the old Pelasgic form we see no trace, but in its place two stately styles—the one, indeed, Asiatic, and the other Egyptian in its inspiration, but both purified and made nobler in the alembic of the new Greek spirit.

#### *Supremacy of Aryan over Pelasgic type.*

And here we may note, in passing, an interesting circumstance which had much bearing on the plastic art of Greece. In the slow welding process, from which resulted that perfect poise of intellectual and bodily gifts which we associate with the Greek name, the elements of race seem to have distributed themselves differently in the spiritual and in the physical order; for while in the former the Aryan type was strongly modified, it prevailed wholly in the latter. In the art of the Periclean age, of which the high truthfulness was one of its noblest attributes, no vestige survives of the Pelasgic type, as we see it, for instance, in Etruscan art, or where its last trace lingers on the marbles of Ægina—a tradition, perhaps, even there, rather than a record. In its stead we find a new ideal of balanced form wholly Aryan, and of which the only parallel I know is sometimes found in the women of another Aryan race—your own.

#### *The Land and People of Greece.*

But if the Greek spirit is, as I said, the outcome of a subtle balance and interaction of various elements of race, let us see how far art, which is perhaps its most characteristic outcome, was further favoured by external circumstances. And, first, a word or two of the land. Let us look at the map. Here are no vast alluvial plains such as those along which, in the East, whole empires surged to and fro in the throng of battle; no mighty flood of rivers, no towering mountain walls; instead, a tract of moderate size—a fretted promontory, thrust out into the sea—far out, and flinging across the blue a multitude of purple isles and islets towards the Ionian, kindred shores. In scale nothing excessive; everywhere measure and moderation. And of this sobriety, which is equally removed from all extremes, this *μηδὲν ἄγαν*, which is the keynote of all things Greek, you find no completer type than in the famous little land where Athens rose and reigned. Spread out to the sun within a girdle of nobly-simple heights, and sweeping gently to the sea to catch the western breeze, it was blessed in an atmosphere of which you must have felt the breath to understand its penetrating sweetness. Attica was not in those times parched and thirsty as we see it now; the dusty olive-groves, which to-day are white along the arid track where Kephissus should flow, are not the “thousand fruited” bowers ringing with the nightingale of which Sophocles sang so lovingly. Nevertheless, as compared, for instance, with Southern Italy, Athens was not exceptionally favoured in her soil. It was a soil liberal, but not lavish, demanding labour, but rewarding it—a fit surrounding for a joyous, wholesome, active life. Such was the Greek land. On this land we have a race built up as we just now saw, and whose religion was rooted partly in ancestor worship, but mainly in the worship of the personified forces and phenomena of nature. Distinctively, it was a race whose dominant thought was not death, but life—an intense life, in which their gods and goddesses shared, but with a higher and ampler vital energy; for these gods, whom they made in their own image, however Xenophanes might chide, walked freely among them, mixing in human affairs, met at every turn, each the ideal of a particular type. Behind these bright divinities, dimly seen, the Moiræ loomed, asserting and embodying those instincts of order and inexorable law which found such noble utterance in the mouth of Æschylus. And this race, very limited in numbers, was further divided into yet smaller communities. When we think, for instance, of Athens, with which our chief concern is, the idea of multitude never presents itself to our minds—we think of a handful of free men; and, indeed, restriction of numbers was part of its own ideal of the perfect state. Now, a first result of these moderate numbers would be the increase in dignity and importance of the unit; and given, of course, the peculiar intellectual vivacity of the race, we should be prepared to see, for the first time in history, the spectacle of a free State, and of that only true conception of such a State which associates its collective greatness with the worth of

the individual citizen. Out of this conception a race, enamoured in a manner till then undreamt of with the pursuit of ideas for their own sake, would be led to form an ideal of a citizen who, while he should be merged in the State in which he is a living force, should render himself worthy to serve it by the fullest and most evenly-balanced development of his being in all its varied capabilities; and this full and evenly-balanced development we see in Athens. How Athenian education was based on this ideal you know. You know that a noble training of the body went hand in hand with the discipline of the mind. You know how high a place was assigned to athletic sports, and that an athlete three times crowned had claim to the public tribute of a statue. And you have learnt what was in the eyes of Greeks the dignity of that bodily frame, which they shared with the gods themselves—a body not, in their simple view of life, at war with the spirit, but working harmoniously with it towards one common central ideal of perfection.

#### *Conclusion.*

Now, the bearing of these things upon our train of thought has not escaped you; you have felt, no doubt, that in a society so constituted and so composed, art, but more especially the sculptor's art, would find a favouring atmosphere such as had never before existed nor can ever exist again. You understand in it the abundance and high level of production, and do not wonder at the multitude of statues which thronged the Altis and the precincts of holy Delphi. And you feel perhaps with fresh force how faithfully in its nobility and its serenity, in its exquisite balance, in its searching after truth, and in its thirst for the ideal, Greek sculpture mirrored at its best the mind of Greece. That these attributes were not less conspicuous in Grecian painting we may confidently assume, however limited and indirect our knowledge of it is. It is, perhaps, in that painted earthenware which has been preserved to us in such profusion, chiefly in Etruscan tombs, that we waylay the Greek draughtsman in his most spontaneous mood. I need not remind you how inexpressible a charm his simplicity, his sincerity, and his unfailing dignity of vision have cast over these precious relics, which we have gathered at the hands and in the homes of the dead.

And here I must, for the present, leave the subject of which I have to-night roughly sketched the outline of a fragment, to resume it, perhaps, at some future time. I have brought you to the culminating point of art in ancient days, the loftiest in many respects to which it has ever risen, and in following its course through various lands have endeavoured to illustrate, as I had promised, its organic connection with the temper of the times and of the races which have produced it. In doing so I have sought only to interest you: I have aimed at no moral lesson. Nevertheless, it may be well, in taking leave of the art of Greece, to remember that if of the attributes which went to make it supreme some are indeed beyond the control of men, two, and not the least bright, are within the reach of all—simplicity, I mean, and truth.

### LEEDS AND YORKSHIRE ARCHITECTURAL SOCIETY.

A DINNER of the Leeds and Yorkshire Architectural Society was held at the Great Northern Railway Station Hotel, Leeds. The chair was occupied by Mr. C. R. Chorley, J.P. (one of the vice-presidents), in the absence of the president (Mr. E. Birchall), and among the gentlemen present were Mr. J. Barran, M.P.; the Mayor of Leeds, Mr. Edward P'Anson, Mr. Cole A. Adams, Mr. Medland Taylor, Mr. T. Smith Woolley.

The Chairman proposed “The Leeds and Yorkshire Architectural Society.” He congratulated the society on the success which had attended it since its commencement, and the steady advance it had made in every one of the objects it had in view.

Mr. J. W. Cannon (one of the vice-presidents) replied. He said their first object was to promote the technical education of architectural students. This they did by offering prizes, by arranging courses of lectures and classes for instruction in design, and by visits to buildings in progress, or to completed ones of special interest. The results had not been all that they could have liked, but they had been sufficient in some few cases to satisfy them that they were pursuing the right course. Their second object was that of fostering a fraternal feeling amongst architects; and their third object was that of gaining the aid and sympathy of those outside their profession who were interested in their work.

Mr. G. B. Bulmer (the honorary secretary) proposed “The Royal Institute of British Architects, the Architectural Association, and kindred societies.” Mr. E. P'Anson, who responded, remarked that the work of the architect expressed the tone and the refinement of the age, and endured to future generations to record the history of the times in which he lived. The toast was also acknowledged by Mr. Cole A. Adams, Mr. Medland Taylor, and Mr. T. Smith Woolley.

Mr. J. B. Fraser proposed “Art,” and Mr. R. Thompson responded. Mr. H. May proposed “Science,” which Professor Thorpe acknowledged. The toast of “Literature,” proposed by Mr. W. H. Thorp, was responded to by Mr. T. Wemyss Reid and



Mr. C. Pebody. Mr. T. Ambler proposed "Law," and Mr. J. W. Middleton replied. "Medicine" was proposed by Mr. G. Corson, and acknowledged by Dr. Eddison. Mr. Leonard Cooper proposed "Trade," and Mr. C. Scriven responded. "Our Visitors" was proposed by Mr. E. Dodgshun, and Mr. C. J. Wright replied.

## SIR CHARLES DILKE ON SCIENCE AND ART

AT the distribution of the prizes to the students of the Hammersmith School of Art Sir Charles Dilke said that in the whole South Kensington system the word "science" was put before the word "art." He blushed to say that his sympathies were rather with the art than the science side. Science in these days seemed more able to take care of itself than art. Goethe expressed this by saying, "Take care of the beautiful; the useful can take care of itself." In these days when science ran riot about us, he was inclined to think that art needed more care and attention at the hands of the community generally than science. As a democratic politician he thought he could defend that point of view from a democratic standpoint. Science had been called democratic, but art was still more democratic. It had been contended that science in the long run rather tended to make the rich more rich, and sometimes in its indirect effects the poor poorer. Before moral and intellectual pleasures, however, all men—poor and rich—were potentially equal, and the poor man who had feeling was superior to the rich vulgarian who was unblest by that sense. But although art was undoubtedly democratic, unfortunately it entered less into daily life than it had done in many cases in the past. The sensationalism, worry, and fuss which might be considered the chief characteristics of the age were fatal to art. Many might with sadness quote the phrase, "What shall it profit a man if he gain the whole world but lose his own soul." He would ask whether, in inventing the telephone and other things in the present day we were not, to a certain extent, losing our soul. We were losing the love of the morally beautiful and the morally true, but he believed this was only a passing phase. Let art men refuse to be crushed by their scientific friends, and let them make that which, according to Darwinian principles, all ought to make, a fight for life. Art studies were peculiarly a relief from the worry of life at the present day. Let them remember that virtue, though obscured on earth, not less survived all material change by lasting loveliness. He agreed with Mr. Ruskin that the very imperfections of an old hand-made picture-frame were preferable to the perfect evenness and polish of the modern machine-made article. But at the same time mere ancientness was not in itself a thing of beauty, as many misguided people evidently thought. He had found in the course of his recent peregrinations among the very poorest of this city, one gentleman whose occupation threw a lurid light on this subject. He (Sir Charles) had said to a lady whom he found in an extremely poor dwelling, "What is your good gentleman's occupation?" She said, "He is a 'worm-eater.'" It turned out that the gentleman lived by making holes to imitate worm-holes in so-called old woodwork. He was not one who believed that beauty consisted in worm-holes.

## ON OPEN SPACES IN TOWNS, WITH SPECIAL REFERENCE TO THE REQUIREMENTS OF ARTISANS' DWELLINGS.\*

BY JOHN HONEYMAN, F.R.I.B.A.

(Continued from page 362.)

BUT we may extend the comparison further, and consider how the sanitary condition of such tenements would be affected by their multiplication. Here, again, we shall find that nothing is gained by the burdensome restrictions already referred to. If we take an area embracing, say ten such plots as we have already described, and providing 2,500 houses by one arrangement and 1,200 by the other, it will be found that the air will circulate more freely among the 2,500 than among the 1,200; every one of the former will be better supplied with fresh air than the latter. That is another most important point as affecting the health of the occupants, and the explanation of it is obvious. It will be observed, by reference to the block plan that the blocks of building on the unrestricted ground are each only 150 feet long; whereas, in the other, they must be 250. Now, if we imagine the wind blowing across the blocks either directly or diagonally, we shall find that there will be a smaller area of comparative stagnation in the first plan than in the second; and when the wind blows on the ends of the blocks, especially when the wind is light, there is a slight but certain gain in the blocks being short and the disconnecting spaces of 50 feet numerous; so that it would appear

that in whatever way we choose to look at it we find that better and more healthful arrangements are possible than those which municipal authorities seem bent upon prescribing; for, I need hardly remind you, that this arrangement which I have shown to be so much the best is prohibited alike by the regulations of our Improvement Trust, and by the clauses of the Burgh Police and Health (Scotland) Bill.

But it may be said that we have left out of sight one element affecting directly the health of a community with which these restrictions are intended to deal, namely, over-density of population; and although I refuse to admit that, subject to the conditions already noticed, over-density as a mere sanitary evil is possible, I do not deny that within reasonable limits the restriction of density is for many other reasons desirable. But taking this for granted, it by no means follows that we are to run away with the idea that the only way to limit density is to compel people to arrange their houses in long dismal rows between streets and mews lanes. There is no necessary connection between the disposition of the houses and the number of them. The limitation of the number is quite compatible with perfect freedom in every other respect. If it is possible on any intelligible principle to determine the number of people who ought to be allowed to live on an acre of ground, there can be no difficulty in determining how many, or what fraction, should be allowed to occupy a square yard, and so to apply the restriction to any area. This evidently would facilitate the imposition of the servitude—for servitude it is, and to that extent an instalment of "state socialism." But if such a restriction were coupled with greater freedom in other respects it would probably not be seriously objected to; and it would certainly be the most straightforward and effectual course. Let us contrast it with the method hitherto pursued, and which it is proposed to perpetuate. Reverting to our previous illustration, it is evident that for our present purpose the area to be restricted must extend to the centre of the streets; we have thus a fraction over 6,666 superficial yards to deal with. We have seen that by the present regulations the greatest number of small dwellings which could be put on this area would be 120, and we have also seen how they must be arranged on the ground. Now, assuming that this is the proper limit of density, the limitation would be effected (without reference to arrangements) directly and effectually by prohibiting the erection of dwellings on the ground to a greater extent than in the proportion of one to 55·5 superficial yards, or the occupation of dwellings to a greater extent than say one individual to every 11·1 yards. I must note in passing that the restriction in the number of dwellings only would not be enough, the primary object being the restriction of the number of dwellers; but if a builder knows that such a servitude exists he will only provide such accommodation as he can profitably let for the number intended, and he cannot complain if the police interfere when that number is exceeded; he would in fact have no legitimate ground of complaint. We have thus a distinct rule easily applicable to properties of all sizes, strictly limiting the density of population, and yet leaving the proprietor quite unrestricted in other respects.

Let us see how such a rule would work in ordinary cases. Taking the plot we have been already dealing with surrounded by 50 feet streets, let us suppose that a builder takes a portion of it near the middle with 30 feet of frontage; by this rule he would know that he would only be allowed to erect ten dwellings upon it. If he took a corner plot with the same frontage he would find himself at liberty to erect fifteen dwellings; and the reason for the difference is quite apparent in the greater amount of free space which the street at the end secures. But under the provisions of the proposed Police Bill he could not possibly get even this moderate density of population on the corner ground, as he would either have to cover too much area, or go too high. In this connection we see what an important element the height of ceiling becomes in determining the amount of free space available for each tenement; because, the number of dwellings being limited, it is evident that the more these are piled on the top of each other the greater will be the area unbuilt upon. I do not mean to say that high tenements are superior to low ones, but what I do say emphatically is that there is no reason why they should be inferior in any respect except convenience, and that as in many instances the choice must be between high tenements or none, to prohibit them is unjustifiable on either economic or sanitary grounds, and in large cities must hinder, more probably than anything else, the satisfactory solution of the difficult problem with which we have to deal. To exemplify this it may be useful to compare the two modes of dealing with a limited area such as we have just referred to, having a frontage of 50 feet and licensed—shall we say?—for ten dwellings. If we put two of these on the ground floor, four on the first floor, and four on the second we can have the number of dwellings in a three-storey tenement occupying an area of say 2,000 feet and being 33 feet high. The width of the free space in this case would be 35 feet. But if we put only two dwellings on each floor the tenement would have five storeys and would be 44 feet high and the width of the free space would be 49 feet. Now in certain circumstances—as for example where the frontage is towards a very wide street or square—this last arrangement would unquestionably be the best. In any circumstances it

\* An address delivered at a meeting of the Glasgow Institute of Architects.



would be better than the other in some respects—as, for example in having only two houses on each landing instead of four, and in having houses a fourth larger—for in the above calculations I have allowed for the increased floor area to secure similar cubic capacity—and it will be observed that while the free space behind the low tenement is only two feet wider than its height, the free space behind the high tenement is five feet more than its height. Of course this result is only possible with eight-foot ceilings. But, as we have already seen, where we have a large plot of ground to work upon much better results can be obtained, even where this stringent rule as to density applies, if other stringent useless rules as to mews, lanes, height of ceilings, width of courts and stairs, &c., are dispensed with, but not otherwise. It is therefore evident that without such rules we would be in a much better position than with them, being able to obtain, with the same density of population, larger free spaces, and at the same time larger and better arranged houses.

So far I have assumed that the limit of density which proposed police regulations would in a roundabout way secure is a proper limit, but I by no means think that it is; on the contrary, it is demonstrable that a very much larger number of healthy dwellings can be erected than in the proportion of 1 to every 55 yards of ground, and any limitation of this large number is unnecessary, and therefore indefensible—the inevitable result of it being to increase house rent without any compensating economic or sanitary equivalent. The need of interference with density only arises where the crowding together of houses prevents the proper supply of light and air to every one of them. Every one will acknowledge that buildings should not be allowed—whether high or low—which have not in front of the windows of every dwelling they contain a sufficient free space properly ventilated. Three things seem necessary for the proper distribution of dwellings in towns, and they ought to be secured by legislative enactment. First, wide streets; second, spaces through which the air can circulate freely; and third, a sufficient cubic capacity for each dwelling. These can be secured without the imposition of onerous servitudes on property, which only tend to frustrate every effort to ameliorate the condition of the poorer working classes. With wide streets, free spaces behind, and a minimum cubic capacity secured, perfect freedom in other respects may be allowed, because in houses as in other things, competition comes in to prevent inconvenience or discomfort in minor details.

It would be easy to show, did time permit, how the acquirement of each of these three sanitary essentials is facilitated by giving up restrictions as to the height of ceilings, the height of tenements, the limitation of the number of dwellings in each block, and the like, but I can now only briefly refer to them. First, as to streets. The health of a district—so far as it is influenced by a plentiful supply of light and air—depends on the extent of its street area more than on anything else. If the streets are broad and short—that is, intersected at frequent intervals by other streets,—the thorough ventilation of back areas becomes a very simple matter. Now it is to be observed that the extent of street area is not only the most important factor in the healthful environment of dwellings, but it is also that over which local authorities have the most complete control. These authorities acting on behalf of the inhabitants of a burgh have a right to say to any one wishing to connect new streets with theirs, that they will allow him to do so on certain conditions—conditions which shall prevent the possibility of over-density, or the risk of the addition to the burgh of any badly-arranged new district. It may suit a person laying off land for building purposes to make his streets 30 feet wide, but the authorities are quite entitled to say—"that will not suit us; your streets must be 60 feet wide or we will have nothing to do with them, either now or hereafter. In other words, if you think it worth while to have your property under our surveillance you must give up and vest in us a certain proportion of the area." This requisition of 30 feet is in no sense a confiscation. It is simply the price which the owner of the land has to pay for the privilege of having his land properly connected with the burgh and thereby enhanced in value. It is perfectly clear that if he were allowed to make the streets the width which suited himself merely, he would gain the privilege without giving anything in return. The difference between the width which would serve his own purposes and the width required for the purposes of the community is all he is called upon to give. In this way (and I know no other), it is possible and legitimate for the community to obtain a small share of that rather elusive commodity, "the unearned increment of the land." If the land is not intended for houses but for business premises or works the same principle should apply; the same width of street would not be required, and this would be a matter of arrangement. In either case the rights of the community should be asserted, and their demands, if not extravagant, would not be seriously resisted; but you will readily see that the addition of such restrictive burdens as we have before considered, would make even a moderate demand for wider streets intolerable.

The bargain once made, and the streets laid off with ample area in proportion to the building plots, it is evident that the relation of the purchaser of one of these plots to the authorities is entirely different from that of the man who originally held and laid off the

ground, because the streets have been laid off for a definite purpose, namely, to give access to these building plots, and the right to form the streets for this purpose has been already paid; therefore the authorities have no further claim on the land. Indeed, it may be said that a proportionate share of such payment has been actually included in the price of each plot, which, moreover, unlike the street, has not been bought for a definite purpose, but for one of many conceivable purposes. With the owners of such plots, therefore, the authorities must negotiate on a totally different footing, if they think it necessary to interfere with the full utilisation of the ground, because clearly such owner cannot be asked to make any further concession unless he is paid for it, and for the same reason, on areas already built upon, additional width of street cannot be justly demanded without full compensation. I think this distinction has been too much lost sight of. Of course no one would think of proposing that such owners should be left free to do anything on their plots prejudicial to the general health or safety; but, saving this only, they are entitled to the fullest liberty. It is peculiarly necessary to bear this in mind when we are dealing with the second essential—free spaces other than streets; and instead of asking all we would like, we must be content with only so much as we are prepared to prove absolutely necessary.

It is clear that the utility of such free spaces depends on their ventilation more than on their width; thus, a court 57 feet wide (as on the block plan) is better than a square twice the width; yet our latest Police and Health Bill would prohibit the erection of houses more than two storeys high in such courts, while it would allow a square 100 feet each way to be surrounded with houses 50 feet high. In any regulations of this kind the ventilation of the space must be taken into account, for it cannot be doubted that a 20-foot lane entirely open at both ends would be healthier than a hollow square 60 feet wide surrounded by houses of the same height. The width of the space must also bear a certain relation to the height of the houses, but this is of less importance, for the height of a building in a narrow street will hardly affect the ventilation, but it will affect the light. There are these two things to be considered—the height of the buildings and the kind of space. There would therefore be considerable difficulty in graduating the requirements to suit all circumstances, but none in devising a better method than that hitherto in vogue.

Lastly, as to the cubic capacity of houses I shall only say that I think it of very great importance that a minimum of capacity should be prescribed. It is evident that the liberty I ask in the matter of height of rooms justifies the demand that their area shall not be unduly restricted, and at the same time does away with any serious difficulty in meeting it.

In conclusion I must remark that many recent writers on artisans and labourers' dwellings seem to expect too much from increased stringency of legislation on the subject; but such legislation must be prudent and discriminative as well as stringent. The stringency must be confined to one or two points essential for the general well-being of the community, and must not descend with mischievous minuteness to unimportant details. The question we have to face is not—How are we to provide good healthy houses for the working classes? It is a question much more difficult to answer—and the difference cannot be too much insisted on—it is this—How are we to provide good healthy cheap houses for the working classes? and you may depend upon it that that is not to be done by stringent regulations which are not absolutely necessary, or which are in any way at variance with the maxims of sound political or social economy. But, gentlemen, another mode of clearing away the whole difficulty has been proposed, and if the country is prepared to adopt it, such considerations need not trouble us a moment. It would make short work of economic maxims and vested interests, for it is nothing more or less than "the good old plan" which, at a very early period of our history, served as the law of the land. That is the panacea which a Cabinet Minister of the present day is not ashamed to advocate. "Political power" is the direct and proper means to the end. By the extension of the suffrage and the redistribution of seats that power is to be placed in the hands of men not "paralysed by incurable timidity in dealing with the sacred rights of property," as our present legislators are; and then of course all is plain sailing! That is how Mr. Chamberlain would clear away all difficulties. "It will be his duty," he tells us, "to tell the people at large" that in this way they can get what they want, if they cannot get it by more legitimate means. They can have the right of might if no other, and it will be their own fault, not his, if they have not full scope for the exercise of that right.

It would be difficult to imagine anything more calculated to paralyse the energies, and alienate the sympathies, of every well-wisher of the working classes than such a declaration by a member of Her Majesty's Government—a declaration which, I shall take the liberty of saying, is as scandalous as it is impolitic.

**Mr. Hormuzd Rassam** has obtained from the Royal Academy of Sciences of Turin the first grand prize of 12,000 frs. (480*l.*), in consideration of the services he has rendered to science by his Assyrian and Babylonian discoveries, the results of which are deposited in the British Museum.



## NOTES AND COMMENTS.

THE equestrian figure which has been placed on one of the pedestals of Blackfriars Bridge as an experiment, is a sample of those works in which French sculptors are adepts. It is very clever, and boldly executed; but, if compared with FOLEY'S *Outram* or *Hardinge*, the difference in style will be apparent. It is only a dexterous artist who could model such a group as M. CLÉSINGER'S, but probably he could produce fifty models of the same class in the course of a year. Why the Corporation should desire to have equestrian figures is not evident—unless from the affection in which the "men in armour" are still held. If it were only a question of scale that had to be decided, why were not casts obtained of one or all of the "Four Continents" which form part of the Albert Memorial? If they will insist on equestrian figures, there will be a difficulty in deciding who are to be the subjects. At one time the Duke of WELLINGTON was inevitable, and so was Sir WILLIAM WALWORTH. But who would occupy the remaining pedestals? JOHN GILPIN as a train band captain might serve for one. What famous equestrian from the City is available for the last—unless a member of the present Corporation is immortalised?

IT is with regret we have to record the death of Mr. RICHARD DOYLE, an artist who appeared capable of displaying his humorous genius for many years to come. We might almost say that he never did full justice to himself. As a youth, he helped his father with the "H.B." sketches, and when he joined the staff of *Punch* it was his delight to caricature the figures which were produced by the high art and mediæval painters of those days. His fancy found more play in the sketches of fairies, which were happily introduced in connection with poems and articles. A design for the cover of *Punch* superseded one by LEECH. His "Manners and Customs of Ye English" were in a different style, and there appeared to be a prospect of his increasing the enjoyment of the public in co-operation with JOHN LEECH. But MARK LEMON, the *bon vivant*, believed that he was destined to be a champion of orthodoxy, and, with some of his gay companions, resolved to uphold the Ecclesiastical Titles Bill. Self-respect compelled DOYLE to resign, but, to his credit, it must be said that his skill was not given to any rival periodical. He etched the illustrations for THACKERAY'S "Newcomes." With the exception of "The Travels of Brown, Jones, and Robinson," "The Bird's-eye Views of Society," an occasional title-page, and book illustration, he rarely drew on the wood after he left *Punch*. In that journal he was most at home. Mr. DOYLE produced some water-colour scenes from fairy-land, which found a place in the Grosvenor Gallery.

WHEN RICHARD DOYLE forsook *Punch* he had not arrived at the maturity of his powers. His successor, Mr. TENNIEL, has vastly improved since 1851, and DOYLE'S skill in drawing and invention would in that time have also grown. As a humourist, however, he has had no successor. DOYLE'S designs did not need a witty description in type to give them point. His scenes could be appreciated by men who did not know a word of English, and some of his Californian situations would overthrow the gravity of a Red Indian. In the illustrations of "The Newcomes" there are indications of more gravity. A deeper spirit is also seen in the bird's-eye views, as in "The Music-hall," where the trapezist is seen risking his neck, while many of the spectators will not be at the trouble of raising their heads to look at him. In scenes of this kind we see how well DOYLE could realise types of character; and although there was less individuality about his men, women, and children than about LEECH'S, they are equally true; and hereafter DOYLE'S may be of more use to the historian and critic.

THE difficulty of providing dwellings for the London poor is seen from the little effect, compared with what is needed, that has been accomplished by the various Artisans' Dwellings Companies after a large expenditure of money. The Artisans and Labourers' Dwellings Company, George Street, Westminster, has a capital of 1,638,670*l.*, and 169,957*l.* additional from deposits, mortgages, &c. It has accommodated about 30,000 persons in 3,935 houses, many for two families, and 177 of the houses are in the provinces. The Improved

Dwellings Company, 34 Finsbury Circus, has a capital of 778,500*l.*, of which 316,000*l.* is borrowed from the Public Works Loan Commissioners. It has accommodated about 20,000 persons, in 4,066 rooms in 29 blocks; and it has other blocks in course of erection, for which a loan of 11,000*l.* has been obtained. The Metropolitan Association, 8 Finsbury Circus, has a capital of 234,082*l.*, of which 46,327*l.* consists of loans. It has provided accommodation for about 6,000 persons, or 1,257 families in 14 blocks. The Victoria Company has a capital of 112,695*l.*, of which 32,275*l.* is in loans, and provides accommodation for about 3,300 persons, or 666 families in 14 blocks. It will be seen that the total capital employed exceeds two millions, and not more than 12,000 families are accommodated.

SUBSCRIPTIONS are sought in order to present a testimonial to Mr. REID, who for so long a time has been connected with the Print Room of the British Museum. There are few students of the collections who are not in some way indebted to Mr. REID, whose courtesy was equal to his knowledge of the history of engraving. Through new arrangements, Mr. REID surrenders the management of the Print Room, and there is a general impression that his retirement is not of his own choice. A public servant who has done so much to make the treasures of the Museum accessible to artists and students deserves a reward, and we have no doubt that the sum of 500*l.* will be shortly collected. MESSRS. SMITH, PAYNE & SMITHS, 1 Lombard Street, have consented to receive subscriptions, which may be paid to the credit of the "Reid Testimonial Fund," or they will be received by Mr. F. SEYMOUR HADEN, or Mr. W. G. RAWLINSON, 17 Savile Row, W.

ON the 7th inst. a rather dramatic scene was witnessed in the Divorce Court of the New Law Courts. Some of the jury described the difficulties under which they performed their duty, and the impediments which had to be overcome before the box was reached. The Judge declared he had no responsibility, and was unable to provide in any way for the safe condition of his court. It should be remembered that the courts have been handed over to public use before they could be said to be complete. There has been no outlay on anything conducive to comfort, and it is needless to say that so long as nothing is done to adorn the walls, courts, waiting-rooms, and corridors must present a cheerless aspect. In the original estimates little more than the shell of the building was included, and Mr. STREET anticipated that he would be able to obtain funds to complete his work. It is now the duty of the Office of Works to authorise whatever is necessary for the lighting, heating, and adornment of the building.

ACCORDING to a statement prepared by the manager of the Edinburgh Street Tramways there are 981 miles of single lines of tramway open for traffic, constructed at a cost of 7,146,341*l.*, or an average of 7,284*l.* per mile. The number of miles run by the cars in the year was 42,185,758, and the number of passengers carried was 295,721,171, or nearly nine tramway journeys for each inhabitant of the three kingdoms. Roughly speaking, the revenue per mile is 1*s.*, the average fare of each passenger conveyed being only 1*7*/<sub>4</sub>*d.* The present working cost of tramways averages 79.22 per cent. of the gross receipts, and of this percentage 43.16 per cent. is spent in horse-haulage alone. Some substitute for this kind of haulage is accordingly desirable and Mr. BRUCE PEEBLES, C.E., is able to testify from his observations, that the wire-cable system is found to answer perfectly in American cities.

THE following artists have been invited to take part in the first exhibition of the newly-founded Cercle des Vingt, to be held at Brussels: From Belgium—MM. ALFRED STEVENS, F. ROPS, MELLERY, HEYMANS, and STOBBAERTS, painters; DE VIGNE, VAN DER STAPPEN, and VINÇOTTE, sculptors. From France—MM. GERVEX, painter; ROTY, medallion engraver; ENGELBERT, MERCIER, and RODIN, sculptors. From Germany—M. LEIBL, painter. From Holland—MM. ISRAËLS' père, MAUVE, and MARIS, painters. From Italy—M. GEMILÒ, sculptor. From Norway—M. BERGH, painter. From England—Mr. WILLIAM STOTT, painter. From United States—Messrs. WHISTLER and W. CHASE, painters.









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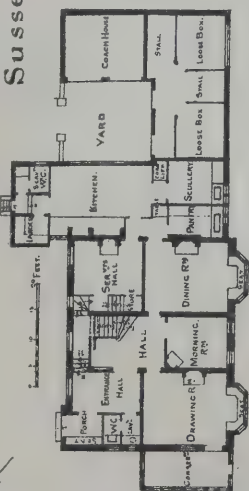
PAINTED TILES &c. BY E. PAGE TURNER,







Plan of a House - Burgess Hill.  
Sussex.



M.E. McCartney - Archt.  
14 HART ST. W.C.











RAILWAY INN, WEST HOATLEY.

James L. McCallister, Esq.



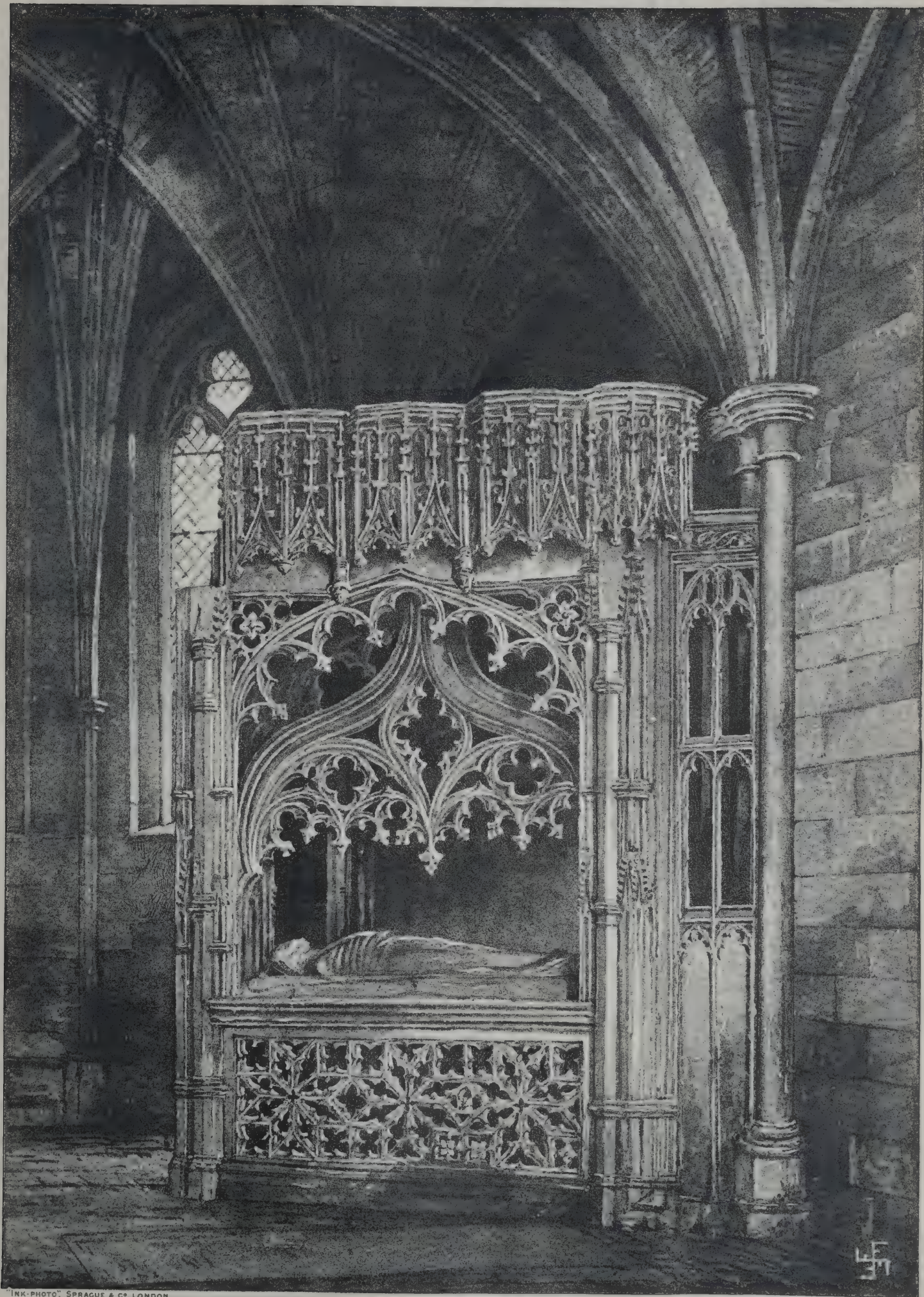


BUSINESS PREMISES, KING ST., TRURO.  
JAMES HICKS, ARCHITECT









"INK-PHOTO," SPRAGUE & CO., LONDON

THE "STARVED MONK'S TOMB," TEWKESBURY ABBEY.

Drawn by R. KNILL FREEMAN, F.R.I.B.A.









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ENTRANCE TO THE CHAPEL OF ST. ERASMUS, WESTMINSTER ABBEY.

By J. CAFE.







## ILLUSTRATIONS.

## RAILWAY INN, WEST HOATHLY.

WE give an illustration this week representing the Railway Inn, which has recently been erected and opened opposite the West Hoathly station on the Lewes and East Grinstead line. The building has been designed in style after the old Sussex houses, and from the rapid rise in the ground a picturesque effect has been secured by raising the ground-floor, with half-basement under the front portion, and approaching the covered porches to the front entrances by means of outside steps. The house is built of red brick up to the level of the first floor, and the ground storey has been erected with hollow walls. The upper portion is of wood framing filled in with brick nogging and covered with ornamental vertical tiling, and the roofs are covered with plain tiles.

There is the following accommodation: On the ground-floor—parlour, bar, bar-parlour, tap, kitchen, scullery, &c., and outbuildings. The entrances to the house, bar, and tap are totally distinct. There is good cellarage in the basement under the front portion of house; on the first floor there are seven bedrooms; and to the south of the premises good stabling has been erected.

The work has been executed for Mr. DASHWOOD, of the Brewery, East Grinstead, and satisfactorily carried out by Messrs. CHARLWOOD BROS., builders, of the same town, the architects being Messrs. JOHN T. CHRISTOPHER and E. EMLYN WHITE, of 16 Bloomsbury Square, W.C.

## HOUSE AT BURGESS HILL, SUSSEX.

THIS illustration is taken from a drawing which appeared in the Royal Academy this year. The architect of the building is Mr. MERVYN E. MACARTNEY, Hart Street, Bloomsbury.

## NEW PREMISES, TRURO.

THE premises shown in the illustration have been lately erected for Mr. BLAKE. The building is on the site of the old high cross, and is near the new cathedral. The walls are of brick, with box-ground Bath dressings, which were supplied ready worked by Messrs. PICTOR & SONS. The architect is Mr. JAMES HICKS, of Redruth.

## LIBRARY CHIMNEYPiece, ABBEYFIELD, SHEFFIELD.

OUR illustration shows a carved oak chimneypiece and over-mantel to a library, which has the walls wainscotted with oak, fragrant cedar book-shelves, and a ribbed plaster ceiling of old South Yorkshire type, from the designs of Messrs. M. E. HADFIELD & SON, Sheffield, for Mr. B. WAKE. The woodwork has been well executed by Messrs. DEALEY & HORNER, Mr. TONY having executed the carving, and Messrs. STUART & SMITH the stove grates.

The painted tiles are by Mr. E. PAGE TURNER, 68 Newman Street, W., and illustrate countries visited in a tour round the world by two members of the family for whom the work has been executed. The jamb to the left of the spectator represents America; animals and birds, with the *Wellingtonia gigantea*, form the background for miniature pictures representing scenes in the States; a portrait of President GARFIELD is given at the top; over this is the first frieze panel, which contains a view of the Niagara Falls. Above the shelf, on the same side, are two panels with scenes in New Zealand; heads of the natives are introduced, birds, and the bones of the extinct *Dinornis*, are painted. In the pediment over the portrait, in the centre, Australia is represented, kangaroos in flight being the middle subject; on either side are the lyre bird and the emu, native tree ferns, and smaller birds filling up the interstices of the design. On the right are panels corresponding with those on the left; in these are painted views in India and Ceylon; below in the frieze the camel market at Aden is represented. This picture and the one of Niagara are supported on either side by shields bearing the arms of England, the United States of America, the empire of India; and Arabia, Egypt and the Nile are illustrated in the jamb below by views, birds, animals, and palm trees. The stove panels and painted hearth also bear out the general idea, although treated in a different key of colour, the tiles in the oak woodwork being in rich tones to harmonise, while those of the stove and hearth

are painted in a more cheerful hue. A strictly decorative treatment has been observed throughout both in drawing and colour.

## THE STARVED MONK'S TOMB, TEWKESBURY ABBEY.

THE tomb that is shown in the illustration is, like all works of the kind elsewhere, attractive to visitors to Tewkesbury. The figure is beyond the province of art, but the beauty of the shrine is unquestionable. The original drawing is by Mr. R. KNILL FREEMAN, F.R.I.B.A., of Bolton.

## CHAPEL OF ST. ERASMUS, WESTMINSTER ABBEY.

ALTHOUGH the Abbey of Westminster has often formed the subject of various paintings and drawings, it is far from being exhausted. There are many parts which are yet unknown to painters and to the public. One of them is the entrance to the little chapel which is supposed to have been dedicated to St. ERASMUS. It formed the subject of a capital water-colour drawing which was exhibited this year in the Academy, and is now reproduced by the ink-photo process.

## THE ARCHITECTURAL ASSOCIATION.

THE third ordinary meeting of the Association was held on Friday evening, the 7th inst., Mr. Cole A. Adams, president, in the chair.

In allusion to the late Mr. R. C. Page, the President said that the editor of *The Architect* had very kindly promised to publish some of Mr. Page's designs. These had now appeared in *The Architect* of that week, and he thought it would be only a pleasing duty on their part that they should ask the honorary secretaries to write a letter to thank the editor of *The Architect* for the courtesy he had extended to them as a body. The suggestion was adopted.

Mr. BERRY, hon. secretary, announced that, by request, the attendance at some of the classes had been postponed from Christmas week to the first week in the new year.

Mr. E. INGRESS BELL then read the following paper:—

## "Papers."

For the origin of the peculiar form of address which is known as a "paper," and which has—not inaptly—been called a "lay-sermon," we must, I suppose, go back to the time of the Greek philosophers, or perhaps to a still earlier date. It was natural when there was no printing-press, and the multiplication of MSS. was both costly and slow, that the poet and the rhetorician should seek to impart their views, when called upon to do so professionally, by means of oral instruction. And it was also natural that, instead of addressing themselves to individual inquirers, they should speak to assemblies of pupils and followers. There are, to my mind, few more attractive pictures in the whole range of ancient history than that of the Greek philosopher, thoughtful and dignified, draped in the most artistic costume ever devised, pacing the cool recesses of the portico and expounding the mysteries of his system of ethics or of art. Groups of eager listeners are disposed picturesquely on the broad steps, or recline against the massive columns, in every variety of graceful attitude, and under every conceivable effect of warm light and purple shade. Above, the blue unclouded sky; in the foreground, dark masses of myrtle or ilex brightened by flashes of colour in rose-bush and oleander, and the whole scene girt in with a belt of grey mountains or the far-off horizon of emerald sea. Such surroundings as these were in themselves an education. I need not sketch for you their modern counterpart. The lecturer spoke from tablets upon which the heads of his discourse were graven—a mere outline generally—to be filled up *ex tempore*. His theme was simplified by copious illustrations, which in the process of delivery would surely occur to the nimble Greek fancy. Sometimes the lecture was written—prepared with the most anxious care and the nicest art, and polished to the highest pitch of literary finish. There are speeches of Demosthenes still extant which were never spoken, in which every expression was weighed and every word artfully adjusted to the end in view. And the example he set was followed by many of his rivals.

The addresses of the Sophists, as they were called—in no invidious sense—were for the most part spoken by those who were accounted masters of particular arts to those who were supposed to be comparatively ignorant of them. The peculiar form of address which is delivered to those who are themselves more or less proficient in the subject-matter is of comparatively modern invention.

It might have been supposed that the invention of printing, with all its marvellous facilities of reproduction, would have almost wholly superseded the practice of oral instruction. But this has not proved to be the case. Either because one is more impressed by what one sees and hears than by what one reads, or more probably from the presence of the



element of personal curiosity, or for some reason unexplained, the address delivered in person maintains its ancient popularity. Although even the American railway porters read Mr. Mathew Arnold's works, it is nevertheless worth his while to cross the broad Atlantic and address in person the crowds of eager listeners who never fail to present themselves at his lectures. Indeed the "paper" promises to become the most popular of all forms of literary exercise. Its modern revival dates from the foundation of the Royal Society, which is but little over two centuries old. That society was instituted for the "improvement of natural knowledge." Its motto is "Nullius in verba." Its proceedings were to be "rather by action than discourse, chiefly attending some particular trials in chemistry or mathematics." The members were to communicate to each other their discoveries at such times as their affairs would permit. They were to "reason freely on the works of nature, pass conjectures, and propose problems on any mathematical or philosophical matter which came in their way." It is sad, but instructive, to have to record that within ten years of the foundation of the society its first historian thought it expedient to inveigh against the prevailing tendency towards luxury and redundancy of speech; and so warm did he wax on this point, as to wish that "eloquence might be banished out of all civil societies as a thing fatal to peace and good manners." He sighed over the evil as inveterate, and knew not where the desirable reform was to begin. So rapid was the progress of the "new learning" which was then agitating all the foremost minds of Europe, that at every meeting some member or members had something to communicate to his fellows. I cannot now stay to recount the strange discoveries and still stranger speculations with which the early records of these meetings abound. But I may remark in passing that to this day the meetings are less formal than of other societies, and I believe I am correct in saying that no syllabus of papers is prepared for the coming session. The society in this respect lives from hand to mouth. But the supply is un failing. The present distinguished President, in his inaugural address, pointed with pardonable pride to nearly two thousand printed pages as the record of the verbal activity of the closing session. The Royal Society has been the parent of a numerous progeny, and the system of the communication of matters interesting to the members has developed into the reading of set papers—a custom which has taken deep root, and threatens to divide mankind into two great families, those who read and those who listen. The first subject in the realm has graced it by his example. One princely brother reads what another princely brother writes, and the royal seal is thus set upon the spreading practice. I did attempt to get at the statistics of the subject, but after accounting for nearly 500 papers delivered in London alone during one session, I found a friend, the secretary of a private dramatic club, arranging a course of papers for private reading and discussion, by a few ladies and gentlemen devoted to the drama. In the face of this evidence of a practice conducted in secret—like the rites of some proscribed sect—it was obviously impossible for me to complete my calculations. If to the known number of papers read in London we add the suspected number of unrecorded instances, and then add a due proportion for all the considerable towns in the kingdom, we reach a total which is little less than amazing. And now the question arises—What is the outcome of all this immense intellectual activity? That also is obviously unascertainable and incalculable. It is, no doubt, considerable. It may be greater than I suppose; but I still think matters may be so ordered that the result, whatever it may be, shall be augmented. A little streamlet, which has for ages trickled down the crag side unregarded, is caught in its descent by a modern philosopher, and by wise conservation and direction of its energy is set to turn certain cylinders, and to generate that subtle and mysterious current which is given off, at the distance of a quarter of a mile, an intense light—white, brilliant, and abundant. Do you think that the broad and deep stream—the ever-widening flood and torrent of "papers"—papers social and scientific—papers æsthetic, artistic, architectural, archæological, antiquarian, and amorphous, give out a light proportionately brilliant and abundant; or, are you of opinion that a great portion of this cataract of learned disquisition—this oratorical Niagara, if I may so call it—passes away in mere confused noise and runs to waste?

And now, having said so much, you may perhaps infer that I would abolish, or at least curtail, the practice of reading papers. Not at all. I think the custom may with advantage be extended. But first it must be systematised; and the attempt can better be made by such a society as this than by more august bodies. There are many lines of inquiry and subjects of collective study open to you which could not be pursued by other bodies without compromising their dignity. It has been noted that fewer books are written by architects nowadays than heretofore. There are compilations of various kinds, and some hybrid volumes which approach, as nearly as the proprieties will permit, the tradesman's illustrated circular. There is also but a feeble struggle for the prize essays on professional subjects, although prize designs bring up crowds of competitors. The further cultivation of the "paper" amongst students would go far to remedy this defect. It has been said that the way to understand a subject is to write a book about it; and I will engage that no one, however conversant he may

have been with his theme, ever set to work honestly to prepare a paper about it without leaving off a wiser man than when he began. The incidental advantages attaching to this form of literary exercise are numerous and obvious, and have often been insisted upon. For my part, I confess that I think a little improvement is practicable, and I would ask your permission to suggest a few points for your consideration, with a view to conserve and systematise the forces at command. Although I wish to treat the subject in the abstract, and make my remarks as impersonal as possible, I must nevertheless keep in view the constitution and aims of the Association whose members I am now addressing.

Papers may be roughly divided into the following classes: 1. Those which embody the results of experience. 2. Those which formulate opinions. 3. Those which record observations. I might add a fourth division for those papers which resemble the later homilies of the Archbishop of Grenada, as reported by Gil Blas; but as papers of this class are never met within these walls, their consideration need not delay us. The papers in the first class—viz., those embodying the lessons of experience—are analogous to the lectures of the university professor. It is not to be expected that many papers of this character can be furnished by the general body of the members, who, for the most part, have their experience to gain. Such papers will, as a rule, be contributed by members who, having passed through the ranks, are engaged in the active duties of their profession. We are glad to accept from one the results of a lengthened experience of the legal side of architectural practice, and to accept them without question. If we want to get at the last lights on, say, the construction of theatres, we must learn from certain architects who are specialists, and in the same way, if we want to be posted up in hospital construction, successful house planning, church design, and so on, we must go to certain other specialists, and the addresses which these gentlemen may be good enough to prepare for us should pass without discussion. A few questions may follow such to elicit further information; but we should listen to them as to experts, and take thankfully the fruits of their long years of study and practice. The second class of subjects—viz., those which formulate opinions—are almost equally unsuited for treatment by young men. Opinion, to be worth anything, should be based upon experience, and experience comes with age. The opinions of young men are necessarily immature and notoriously unstable, their instability being only equalled by the confidence with which they are advanced. If this were a mere debating society, any subject would serve as a field for the practice of dialectics, and as a school for acquiring the art of public speaking, but it aspires to more practical ends, and merely speculative matters should absorb but a small part of our attention. We now come to the third class of papers—viz., those which are the records of personal observation—of which an excellent recent specimen will be fresh in the recollection of you all. This is a class of paper peculiarly fitted for the members of the Association, and one which should, it is thought, be more assiduously cultivated. Every year the seekers after knowledge go further afield, and every year the search grows more keen. Nothing would so much sharpen observation and help towards systematising the results as the knowledge that it was to be put into shape for the benefit of fellow-students. If the experiences of such were embodied in a compact and business-like paper, illustrated by equally business-like sketches, the greatest possible benefit would accrue to all concerned. For such a form of literary and artistic exercise is twice blessed—"it blesses him that gives and him that takes."

It is upon every account desirable that the Association should lean as little as possible upon extraneous support, and that the papers read at these meetings should as far as possible be contributed by the younger members. The record of personal observation affords one means to this end. But there are other opportunities of the same nature which appear to be but little used. If, as Bacon says, reading makes a full man, writing an exact man, and speaking a ready man, here we have an opportunity of acquiring all the literary virtues at once. It is a matter of common remark that one is more impressed by what one hears than by what one reads, and doubtless many a book that would otherwise be comparatively sterile, would, if translated into a lecture, bear fruit. It may be asked, Why should one member give up his time for the benefit of his fellows? I only mention this objection to express my belief that it would not weigh with the members of the Architectural Association; but as the labourer is worthy of reward, I would suggest that the permission to read a paper before the assembled members should be regarded as one of the prizes of the Association. I speak under correction, but my own opinion is that there would be a keen competition for the honour, that much unsuspected talent would very soon become apparent, and many an obscure little rill would show itself in a new character as a brilliant light.

Now a word as to the discussions which naturally follow certain papers, and which are often the least satisfactory part of the entertainment. As I have said, some papers should be received without discussion. Some demand the concurrent testimony or the criticism of those to whom they are addressed. Such papers should be so framed as to contain propositions upon which distinct



issues should be raised, and which should be spoken to explicitly. This part of the proceedings is often at present independent of all restraint. The worst of papers has some sort of coherence, consistency, and aim; but in the resulting discussion any member may start some wholly irrelevant subject, and lead the entire meeting off the track. This is constantly done; the scent is lost, and the stragglers, blown and winded by a fruitless run, are only recalled by the chairman's vote of thanks for the always remarkably excellent paper—a paper, notwithstanding its excellence, which often leads to no practical result whatever. This feature is not confined to any particular body, and is no more frequent here than elsewhere. Papers which are to be followed by discussion should have an interval between the reading and such discussion, so that the speakers may have time to think over the matter. Distinct propositions should be advanced, and the succeeding remarks should be rigorously kept to the subject-matter. By this means we might hope to get a sort of consensus of opinion upon many interesting topics, and essays prepared with much care would fill a useful function, instead of being, as they now too often are, the mere amusement of an idle hour. And such papers should not be too much spun out. Let me quote once more from the history of the Royal Society, and the rules which they endeavoured to impose in the matter of the communications addressed to that learned body when those communications had a tendency to become wordy and diffuse: "There has been a constant resolution to reject all the amplifications, digressions, and swellings of style; to return back to the primitive purity and shortness, when men delivered so many things almost in an equal number of words. They have exacted from all their members a close, naked, natural way of speaking—positive expressions, clear senses, a native easiness, bringing all things as near the mathematical plainness as they can." I confess to being an offender in nearly all these points; but that I may not be regarded as an utter castaway, I will so far "reck my own rede" as to summarise the foregoing propositions, which are:—

1. That papers embodying matters of professional experience should not be attempted by young men, but should be thankfully received from experts without cavil or critical discussion.
2. That papers formulating mere opinions should generally be avoided by the younger members of the Association.
3. That papers of observation are their peculiar province, and should be sedulously cultivated as a useful exercise to both readers and hearers.
4. That papers embodying and condensing the researches of distinguished writers could be made a valuable discipline for those who would undertake the necessary analysis, and the reading of such would prove a valuable service to the general body.
5. That the reading of a paper should be regarded as a distinction confined almost entirely to the active members of the Association, the permission of the executive being a guarantee of the excellence of the essay.
6. That the resulting discussion on any paper suitable for such should be severely regulated, and tend to the direct confirmation or the reverse of distinct propositions.
7. That all irrelevant and purely conversational comment should be repressed.

It is rarely the case that architects in full practice can afford the time to prepare papers for the edification of their younger brethren in the profession, although they all no doubt have the will. But that many of them would furnish the necessary materials for the compilation of such papers I have no doubt. And there could be no better exercise for a young man than a careful study of the works of any architect who had shown himself a master in some special work of art, whether ecclesiastical, domestic, civic, or what not, with the view of ascertaining the secret of his success. A series of working drawings of Board schools, for instance, would form a most valuable exhibition, and it would be invaluable if accompanied by a carefully compiled account of the principles embodied in the several designs, the accommodation secured, the difficulties of site or foundations surmounted, the constructive methods adopted, and the cost. A similar series for science schools, or for municipal buildings, for markets and other important works, might follow at decent intervals, and would form an educational exercise of the highest value. It is not likely that the members themselves could, from their own practice, obtain the materials for this form of paper; but I should be much surprised if the courtesy, which always allows the members of the Association to inspect actual works in progress, stopped short of rendering facilities for this sort of comparative examination of the works of the more successful architects of the day. Criticism should, of course, be suppressed; the object being to learn from the successful works of an acknowledged master the lessons which his works convey.

There is still another field open to the earnest student. From time to time books are published which embody the thought and work of a life; books which are too expensive for a young man to buy, and if read and studied thoroughly as they deserve to be, would take up a larger share of time than in this busy age is likely to be spared for the purpose. It would be not only a profitable exercise for the individual, but a wholesome economy of the energies of the general body of students if one, to whom the requisite facilities required be given, would master the subject, reduce it to a  *précis* , and give an intelligent verbal rendering of it, with appro-

priate comment and illustration. With some such modification the "paper" may not only retain its strange attractiveness, but become increasingly useful. In conclusion I admit, without reserve, that I am a shocking example of the system I deprecate; but I shall be content to account myself the last and worst specimen of a faulty system if, by drawing attention to this matter, I can be the means of inaugurating a better.

Mr. STANNUS proposed a vote of thanks to Mr. Bell for the paper he had read. In allusion to the suggestions thrown out in it Mr. Stannus observed that most people would read the digest of a work which they would not attempt to wade through in the form of a ponderous book. No writer there was he thought that could not be boiled down, or even evaporated to dryness. The Association had always been looked on as the opportunity for the budding orators of "another place" to try their powers of speaking. The first speech he had ever made was before the members of the Association, and it had been a great breakdown. Others, he hoped, would, under similar circumstances, receive the same consideration that had been extended to him on that occasion. If discussion wandered somewhat from the point it should be looked over, so that they might acquire the power of enunciating their opinions before a number of people. A young architect never knew how soon he might be called on to speak in public, for example, before a committee, &c.; therefore he hoped they would at times be allowed to digress, for the sake of the practice it gave the younger members in speaking. He agreed with Mr. Bell that the reading of a paper should be considered an honour. He thought the junior members might write and submit papers to the committee for approval. Papers also might be written on selected subjects, and when the month of October came round, they would not have to go in search of papers. In referring to the medals given for the best papers read at the Institution of Civil Engineers, Mr. Stannus said that a prize might be given for the best paper read in the session, whether by a member of the Association or not, and one for the best paper read by a member of the Association. It might also be worth while from time to time to publish a collection of the best papers, with such improvements as might occur to the authors.

Mr. J. A. GOTCH seconded the vote of thanks, and remarked that these suggestions were valuable ones, but that the difficulty would be to carry them into practice. If the number of essays sent in last session in competition for the Essay prize were any criterion of the power of writing essays, that power seemed to be extremely limited, for only two essays were sent in. In his opinion it was already a great distinction to read a paper at the meetings, but he was not sure that they would increase their audience if they did not go outside the Association for papers. No man was a prophet in his own country, and they would find the room empty when a paper came to be read by Harry or Dick, &c. Then, again, as a first requisite a paper should not be dull, and if they were going to have much boiling down—even to dryness, as Mr. Stannus said—it would be done at considerable peril. Instead of dry bones they wanted flesh and blood, and the more beauty the flesh and blood had the better. They ought, therefore, to be most careful before they did anything which would make papers less interesting. It was a difficult thing to write a paper worth reading, and in the next place it was very difficult to read a paper properly. He had had a good deal to do with various societies, and his experience was that few succeeded in either. Papers should also be simple, and if they were to give papers such as Mr. Bell suggested on Board schools, the audience would either go out of their minds or out of the room. Complicated figures were always avoided in political speeches. Anything distinctly dry or skeleton-like was always better delivered in the form of an article or a pamphlet than as a paper. They came to the meetings to be partly instructed and partly amused, and they did not want to go away with a headache. In a word, he considered that a paper should be as simple and elementary and as lively and pleasant as possible, and anything in the way of dry details should be given otherwise than orally.

Mr. W. H. PRATT said there were two points of view to consider papers from—whether papers should be written to attract an audience or written in such a way as to be of value for readers. He considered it was important that papers should be given for hearing rather than for reading, because more knowledge and information was gained by listening to a paper than from reading it afterwards. Mr. Bell said they should lean as little as possible on extraneous help in the matter of papers; but he did not agree with Mr. Bell in this. The Association had up to now done extremely well by going outside their society for papers, and it had attracted large audiences. In addition, they got the results of men of experience put before them. The aim of the committee had been hitherto to get persons who were practical architects to give them such papers as Mr. Bell had suggested, and in matters of detail improvement might perhaps be made. It would never do for architects to hand over their materials for another person to work up into a paper. If they could not have the men themselves, it would be better to go elsewhere for a paper. In an association of students, what Mr. Bell had said as to young architects not speaking or reading papers without experience must not be taken too strictly, or it would do harm to the discussions. It would



rather be an advantage not to be called to order, if at times they transgressed.

Mr. C. H. BRODIE said he differed from Mr. Gotch when he said that members would not come to hear their fellow-students read papers. The contrary happened on the occasion of two previous papers—one on "Italy," and another on "Sketching Tours."

Mr. F. T. BAGGALLAY said that in the papers read to them they had from time to time listened to a great variety of subjects. Sometimes the papers were archæological, and discussed why certain bits of pottery had been built into walls of buildings, and sometimes they listened to papers scientific and deep, so deep that the lecturer, seeing by the countenances of his audience that it was too deep for them, rushed to the black board, and did very accurate sums, which only mystified his audience the more. They had, however, few papers from which they could carry away useful ideas. What they wanted was to be able to carry away something to think of, and which might be further developed at a future day.

Mr. A. T. ELLISON said he thought that there would be no difficulty in getting papers written by the members if the proper steps were taken to get them. At the end of the session a list of subjects might be prepared and members invited to write on the subjects; the committee could then select the best papers out of those submitted. Every young architect ought to learn how to put his ideas before an audience in proper form, and he thought there ought to be a class in which they might be able to practise speaking. He had often asked members to join him in practising speaking and debating. The class of construction, in which papers were read and discussed, was, he had noticed, one of the best attended of the classes.

Some other members having joined in the discussion,

The PRESIDENT said Mr. Bell's paper had provoked more discussion than any before that he remembered. The numerous remarks it had elicited showed how general the interest had been; and if it tended to increase the number of papers, the increase would be desirable if the papers were as interesting and as pleasantly delivered as the one Mr. Bell had just read to them. The time of the Association was already so filled up that anything in the shape of a debating society would have to be established outside the Association. It was merely necessary to point out what great advantages London possessed in respect of such societies. The President then put the vote to the meeting.

Mr. BELL, in reply, commented on various remarks which had, he thought, been made in misapprehension of his real meaning. With regard to what Mr. Gotch had said on his suggestion to have some papers, as studies of the works of architects—Board schools, municipal buildings, &c.—that such papers would result in tables of statistics, and drive people out of the room or out of their minds, he would remind them that Mr. Gladstone used to make the Budget read like a fairy tale, so that people were sorry when he had finished. He had certainly no intention of appearing to try and repress young architects; rather the gist of his paper was that young men should be encouraged and led to esteem it an honour to address their fellow-students. He felt it was a great misfortune the younger men so seldom came forward, for he could not believe that in an army of young architects numbering over 1,000 there were not many who could not bring before their fellow-students what they would be glad to hear.

## SOCIETY OF ANTIQUARIES OF SCOTLAND.

THE usual monthly meeting of this society was held on Monday, Mr. Ramsay of Kildalton, M.P., in the chair. Before proceeding to the business in the billet, Mr. J. R. Findlay, the secretary, called attention to a group of four *figurine*, or small statuettes of terra-cotta, from Tanagra, in Boeotia, which he had obtained in Naples. These charming little figures, which were first prominently brought into public notice at the International Exhibition in the Trocadero in Paris in 1878, were found in considerable numbers in the ancient necropolis of Tanagra. The tombs were of two kinds—an earlier series, with painted vases, and a later, which consisted of cists formed of slabs of tuft arranged in rows. The *figurine* were found sometimes in the cists, sometimes on the covering stones. Their object was not explained in ancient literature; but they are works of art of a very high class, exhibiting a peculiar beauty and sweetness of expression, and are valuable as giving types of the familiar life of the Greeks that are nowhere else to be found.

The first paper, by Dr. Robt. Munro, F.S.A. Scot., Kilmarnock, gave an account of the megalithic monuments of Holland, and their associations with analogous remains in Northern Europe, from observations made during a recent tour through the Low Countries and Scandinavia. The museums of Holland, he remarked, are not rich in prehistoric remains, and, with the exception of a remarkable group of rude stone monuments called "hunebedden," or giants' graves, which are found in the north of the country, Holland possesses no megalithic remains of any kind. These "hunebedden," of which Dr. Munro visited a considerable number, situated chiefly in the province of Drenthe, are elongated chambers, the sides and ends formed of large stones set

in the ground, supporting enormous covering stones. When there was an entrance to the chamber, it seems to have been placed usually on the long side facing the south, the direction of the chambers being generally east and west. In some instances they were surrounded by a second range of smaller stones, but only a few show indications of having been formerly covered by an earthen mound. No traces of bronze or any instruments of metal have been found in them, and Mr. Franks has assigned them to the age of polished stone implements. During the years 1866-68 these monuments were threatened with complete destruction, owing to the peasants having commenced to break up the stones for road metal; but fortunately the Government interfered, and purchased the land on which they were situated, and they are now preserved as national monuments. Akin to these megalithic monuments of Holland are the "jettestuer," or giants' graves, of Denmark, of which Dr. Munro described a characteristic example visited by him at Roeskilde. The chamber was about 8 yards long, 3 yards broad, and rather over 6 feet high. The roof, which was formed by four immense blocks of stone, was supported by fifteen great slabs set also on end, which completed the circumference of the chamber. This sepulchral construction differed from those in Holland by being wholly covered by a great conical mound of earth. The objects found in these Danish chambered mounds are entirely of the Polished Stone Age. Dr. Munro next described the Stone Age burials of Sweden. In this country the megalithic tombs are confined chiefly to the southern provinces, and number in all about 500. Their variety of construction is greater than in Denmark and Holland; Hanover, Oldenburg, and Mecklenburg are rich in similar monuments of the Stone Age, and Dr. Munro exhibited photographs of several in the district of Stralsund and the Isle of Rugen, taken for Dr. Rudolf Baer, to whom he was indebted for duplicates. In conclusion, he referred to the chronological sequence of the burial customs deduced from a comparative examination of the contents of these tombs in Northern Europe.

The second paper was entitled "Notes on some Continental Museums—in France, Central Germany, and Belgium," by Dr. Joseph Anderson. The nature of the national collections in the museums of St. Germain, Mayence, and Brussels was described and the methods of arrangement indicated. Dr. Anderson also noticed a number of the provincial museums of France, Germany, and Belgium, instancing those of Amiens and Rouen in France, Bonn and Cologne in Germany, and Namur in Belgium, as collections of interest and importance. In conclusion, he drew attention to the characteristics of the Scottish collection as compared with the national collections on the Continent, the most important of which he had now at different times examined. While there were on the Continent national collections that were of greater extent than that of Scotland, he had nowhere seen one more completely illustrative of the whole consecutive history of culture within a national area, and nowhere a collection of such importance so inadequately accommodated.

In the third paper, entitled "Notes on some Continental Churches," Mr. J. R. Walker, architect, F.S.A. Scot., called attention to the characteristic features of some of the finest of the Gothic and Romanesque churches of the north of France, the Rhine, and Belgium, illustrating his remarks by an extensive series of photographs and a number of drawings of fonts made during a recent tour in company with Dr. Anderson. After adverting to the differences that distinguished the contemporary Gothic architecture in France and England, he noticed the special characteristics of the cathedrals of Amiens and Rouen, the former of which—admittedly one of the most beautiful in Europe—is nearly contemporary with Salisbury; the church of St. Ouen, one of the most splendid specimens of ecclesiastical architecture in Normandy; Notre Dame, in Paris, with its peculiar horizontality of feature; and St. Denis, the Westminster of France. Passing next to the Romanesque churches of the Rhine, a group in every way worthy of the most careful study both by the antiquary and the architect, he noticed the interesting church of Worms, which retains a peculiarity common to many of the German Romanesque churches, viz., the possession of a double choir, one east and one west; the church of St. Alban at Mayence, begun in the tenth and finished in the eleventh century; the church of St. Castor at Coblenz, and the cathedral at Frankfort, standing in the midst of the old town, with its picturesque old wooden houses, recalling the older parts of old Edinburgh; the cathedral of Limburg, romantically situated on a rock rising high above the town; and the still more ancient and peculiar church of Dietkirchen, further up the Lahn. A volume might be written on the churches of Cologne and the magnificent works of art they contain—the Church of the Apostles, St. Gereon, and St. Mary in the Capitol, the last of which, for symmetry of plan and beauty of internal effect is not excelled by any other church in Germany. The cathedral itself, and the church of Great St. Martin, next to it, are most conspicuous in the town. The churches of St. Severin, St. Andrew, St. Cunibert, and St. Ursula have each their special features of interest, and in many of their chapels and treasuries the works of mediæval art—fonts, monuments and shrines, or other relics—are numerous and important. The splendid minster of Aix-la-Chapelle, the churches of Liège, Brussels, Antwerp, Ghent, and Bruges were also noticed.



## EDINBURGH ARCHITECTURAL ASSOCIATION.

THE following is an example of the home exercises in the class of construction which are to be worked by the members:—

Find the centre of gravity of the cross section of a cast-iron girder 2 feet deep, bottom flange 18 inches by 2 inches, top flange 6 inches by 1 inch, thickness of web at top 1 inch tapering to 1½ inch at bottom flange. Where is the "neutral axis?"

A rod of wrought iron 2½ inches diameter, and 20 feet long, is used as a vertical tie in a roof, and the stress is such as to elongate it one-eighth of an inch. What is the pull in the rod? what is the "limit of elasticity" of material?

A cantilever, 8 feet long and 9 inches deep, of 1 cross section, is fixed into an 18-inch brick wall so as to project 6 feet 6 inches. Find the horizontal stress in either flange if a weight of 1 ton is suspended at its extremity.

If three of the above cantilevers are placed 10 feet apart, what will be the minimum necessary height of the wall resting on these cantilevers? Specific gravity of brickwork equals 112 lbs. per cubic foot. What are the forces and couples (if any) keeping these cantilevers in equilibrium?

## THE ROYAL ACADEMY SCHOOLS.

THE prizes obtained by the students of the Royal Academy of Arts were distributed on Monday at Burlington House. Sir F. Leighton, P.R.A., remarked that before delivering the formal address which was expected from him on an occasion like this, he desired to say a few words on the competition. When the works which were submitted to the members of the Academy did not rise above the average level of merit, or when they in some cases fell slightly below it, silence would be natural and admissible. But if the level were in some cases higher than usual—and that, he was happy to say, was the case this year—mere justice, as well as his own inclination, compelled him to take note of so gratifying a fact. Before doing so, however, he should wish to repeat what he had said on a previous occasion, and what could not be said too often—namely, that a large competition and award of prizes could only give an incomplete, an unsatisfactory, and an inadequate expression of the impression which had been made upon the body by the whole series of the designs in the competition. It would bring before them the fact that certain works were better than others; but it did not tell them by how much those works were better than the others, nor could it bring before them that close and nice balance—a matter very often of a single vote or of two votes—which existed between the work of a student who went away covered with honours and the work of another who went away unrewarded and unrecorded. It appeared to him that this consideration might afford a certain comfort to those among his audience who felt that they came under the latter category. In three classes very excellent work had been brought before the members of the Academy—viz., in the painting of the head from the life, in the cartoon of a figure life size, and in the 10% premium. But there were two classes in which the work rose to a higher level. One was that of the sets of six drawings from the life, in which the work was very excellent; and the other was the competition in sculpture. They all knew with what warm and vigilant interest he watched the development of this great art among them, and what he said on his own behalf he might also say on behalf of all his colleagues. Therefore they would the more readily believe with what unfeigned satisfaction and joy he hailed every such sign of vitality and strength in that branch of their study.

The distribution of the prizes was then proceeded with as follows:—

Historical painting—*St. Peter denying Christ*—gold medal and travelling studentship (200*l.*), William Mouat Loudan. Landscape painting—

Calm and deep peace on this high wold,  
And on these dew-drops that drench the furze,  
And all the silvery gossamers  
That twinkle into green and gold

—Tennyson, "In Memoriam," XI.—Turner Gold Medal and Scholarship (50*l.*), Robert Octavius Rickatson. Landscape painting—*An old English Country Inn*—Creswick Prize (30*l.*), H. A. Olivier. Painting of a figure from the life, silver medal, first, not awarded; second, George Goodwin Kilburne. Painting of a head from the life, silver medal, first, Emily Merrick; second, George Walton, disqualified owing to having received the same medal last year. Copy of an oil painting—*Virgin and Child*, by Van Dyck—silver medal, first, not awarded; second, Kate Bannin. Copy of landscape—*Landscape*, by Pietro Francesco Mola—silver medal, not awarded. Cartoon of a draped figure—*Antigone pouring the Offerings over the dead body of her Brother*—

... from a vase of bronze, well wrought, upraised,  
She pours the three libations o'er the dead

—(Sophocles, "Antigone"), silver medal and prize (25*l.*), Maurice William Grieffenhagen; silver medal (extra), William Henry Mar-

getson. Design in monochrome for a figure picture—*The Martyrdom of St. Sebastian*—Armitage prizes, first, 30*l.* and bronze medal, not awarded; second, 10*l.*, Charles Douglas Richardson. Design for the decoration of a portion of a public building—*The Angel appearing to the Shepherds* (St. Luke ii.)—prize (40*l.*), Margaret Dicksee. Drawing of a figure from the life—silver medal, first, George H. Sydney Cwell; silver medal, second, William Dickson. Set of six drawings of a figure from the life—first prize (50*l.*), John Ernest Breun; second prize (25*l.*), Herbert Sydney Percy; third prize (15*l.*), John Evans Eccles; fourth prize (10*l.*), Sidney Paget. Drawing of a head from the life—silver medal, first, Annie Mary Youngman; silver medal, second, Christine Connell. Drawing of a statue or group—silver medal, first, Edward Clegg Wilkinson; silver medal, second, Minnie Jane Shubrook. Drawing of a statue or group—prize (10*l.*), Harry Windsor Fry. Perspective drawing in outline (open to painters and sculptors only)—*One of the Staircases leading from the Embankment to Waterloo Bridge*—silver medal, no competition. Line engraving of a drawing of a figure from the life—gold medal and prize (25*l.*), no competition. Composition in sculpture—*Socrates Teaching the People in the Agora*—gold medal and travelling studentship (200*l.*), Henry Bates. Set of three models of a figure from the life—first prize (50*l.*), George James Frampton; second prize (20*l.*), Frederick William Pomeroy. Model of a design—*Aeneas Bearing Anchises on his Shoulders from Troy*—first prize (30*l.*), Arthur George Atkinson; second prize (10*l.*), Emmeline Halse. Design for a medal—saving life—silver medal, no competition. Model of a figure from the life—silver medal, first, Frederick William Pomeroy; silver medal, second, Henry Bates. Model of a statue or group—silver medal, first, not awarded; silver medal, second, Arthur James Wall. Model of a statue or group—prize (10*l.*), Agnes Pringle. Design in architecture—an academy of arts—gold medal and travelling studentship (200*l.*), Edwin George Hardy. Set of architectural drawings—the two eastern bays of the north cloister of Westminster Abbey—silver medal, first, Thomas Maclaren; silver medal, second, Albert David Smith. Set of architectural designs (upper school)—a London house—prize (25*l.*), Reginald T. Blomfield. Set of drawings of an architectural design (lower school)—prize (10*l.*), Thomas Ward. Perspective drawing in outline (open to architects only)—*The Tower and Spire of Bow Church*—silver medal, William Toogood.

Sir F. Leighton next delivered his address, which is printed on another page.

## LINCLUDEN ABBEY.

AT the monthly meeting of the Dumfriesshire and Galloway Natural History and Antiquarian Society, Mr. Barbour, architect, read the first of two papers on Lincluden Abbey, which has recently been undergoing excavation at the expense of the proprietor, Captain Maxwell of Terregles, and the architectural beauties of which have been thus revealed afresh. The abbey was founded in the last half of the twelfth century—about 1160—by Uchtred, Lord of Galloway. Archibald the Grim, Earl of Douglas and Lord of Galloway, converted it from a nunnery (in consequence of certain scandals) into a collegiate church and founded a chapel, in the reign of Robert III., where he erected a monument to his father, the Good Sir James. Princess Margaret (granddaughter of Robert Bruce), as Countess of Galloway, was a liberal benefactress of the establishment, and at her death she was buried in it—1450. The ruins as they have hitherto appeared are supposed to belong to the fourteenth century, but the recent excavations have exposed portions of the foundations of Uchtred's edifice. Mr. Barbour's paper dealt chiefly with the buildings following upon the foundation of Uchtred. The remains of the twelfth century, he said, show that the church, or part of it, was probably erected within a short time of the date of the foundation, but either its entire building extended over something like a century, or important alterations were made upon it at that distance of time after the foundation; that it consisted of a nave 56 feet by about 20 feet, a north aisle 9 feet wide, and which appears not to have been the same extent westwards as the nave; probably also a south aisle of like width, a chancel about the same width as the nave, but probably considerably shorter than the present one, short chancels being common at this period; and there would also no doubt be the other buildings necessary to the establishment. The nave was separated from the aisles by arcades, which if they extended westwards as far as the nave would be of four bays; the piers and western responds were probably cylindrical, and the eastern responds were clustered and rested upon pedestals which received the ends of steps ascending to the high altar, and the piers were united by depressed pointed arches, recessed and double splayed on section, and having a hood moulding; the western doorway was about 4 feet 3 inches in width, and it had a semicircular arched top, two of the rings of which were decorated with zigzag ornaments, and the steps of the doorway descended to the church; the windows, when after a lapse of some time the building had been completed or had important alterations made on it, were divided by mullions and tracery, and some of the tracery had circular-top openings cusped; the walls were of the



red sandstone of the district, probably found at the river-side near the site; the floor was of sandstone pavement, and the roof, the construction of which we do not know, was probably covered with slates, large numbers holed for pins being found embedded in the walls of some of the latter parts of the ruins. The church was in style principally transition from Norman to Early English, but with some parts in the latter style well developed. It was small, and not highly decorated, but not, as has sometimes been suggested, comparatively rude. The architectural style in which it was built, and which characterises a great number of the finest mediæval buildings in England and Scotland, was well worked out, and the design was simple and massive, but not without some touches of lighter ornamentation.

### THE NEW LAW COURTS.

THE report of what passed in Sir James Hannen's court on the 7th inst., illustrates, says a correspondent of the *Times*, the two prevailing characteristics of the New Law Courts—darkness and draughts. Let me endeavour to give some idea of the extraordinary qualities of the building in these two particulars.

Access is given to the various courts, offices, and rooms which surround the central hall by three "corridors," as they are called, one of which is for the exclusive use of the judges, the second for barristers and others concerned with trials in progress, the third leads to various offices and rooms. Most of the judges' corridor is fairly lighted, the rest is as described by Sir James Hannen. The barristers' corridor is almost always, even throughout the brightest days, lighted by the electric lamps. The third corridor is so dark that gas is indispensable there even at the brightest noon in summer. Judging from the complaints of the jurors in Sir James Hannen's court, there seem to be stairs or passages to be traversed by jurors which are dangerously dark. Under the courts is a series of waiting-rooms for witnesses, but these are so gloomy and forbidding that they are never used. Nobody would stay there a moment who could by possibility escape. Adjoining these are prison-like chambers where juries who do not at once agree are locked up. Here the want of light amounts to more than a mere discomfort, since it is often impossible, for example, to examine documents as effectually as this should be done when fraud or forgery is alleged, otherwise than imperfectly. The refreshment-rooms, it may be added, are scarcely less repellent, and the profits to be made by the contractors for this department can be but lean, owing to the essential unattractiveness of the rooms, which can never be made agreeable resorts, and are, moreover, difficult to find. The real truth is that the interior arrangements of the whole building are characterised by the gloom and confinement which would be appropriate enough to a Carthusian monastery, but which are altogether out of place and highly inconvenient in a great and busy centre of public business. The normal penumbra in which London has to do its work surely did not require aggravating, and to an absurd degree, by express design.

It appears that the Probate and Divorce Court, and therefore also, probably, the other contiguous courts on the west side of the central hall, since these are similarly constructed, are *loca facta furentibus Austris* in respect of draughts. The Courts of the Queen's Bench Division have all this defect in various degrees. In the course of the present week either judge or jury, or both, have made complaints of no less than five of these courts, and in one of them both judge and jury have done so loudly and repeatedly. The very important case of *Priestman v. Thomas* was conducted under considerable difficulty owing to the state of the court. Judge, jury, and the public were treated like the bad angels in "Paradise Lost," who, as will be remembered, in order that no experience of excessive discomfort might be wanting to them as arch-culprits, are represented as having been alternately baked and frozen. Milton's imagination, however, fell short of conceiving the miseries of an oppressively heated and dried atmosphere traversed by chilling blasts, which is, unhappily, a too familiar state of affairs in the new courts. Only a very small proportion of the complaints which are made from the Bench and the jury box—whence the only audible complaints can come—are reported in the newspapers; but the number which have found their way into print within the last few days should, surely, have engaged the very grave attention of those who are responsible for the evils which have now been sufficiently proclaimed.

The state of things which exists at this moment may be described as follows: The intention of the whole arrangements for ventilation is that air shall be pumped up through holes in the floor and be drawn off by "exhausts" near the ceiling, so that there may be a constant upward flow. In practice, the exact reverse of this occurs. There is a steady, and almost unrelenting, descent of cold air down the walls behind and at each side of the Bench, forming a current (the "plunging draught" of the Probate Court) which sweeps across the seats and desks immediately below the Bench. This current finds its way upwards in a broader and less exactly defined stream near the public gallery, and escapes mainly by the two exhausts on either side of that gallery. The

downward current which has been mentioned is but little felt when the external temperature is about the same as that within the courts, but it becomes stronger with colder weather, and may thus be expected—and the prospect is not encouraging—to attain in January a malignant vigour which it does not yet by any means possess. It has often been found sufficiently active to blow smouldering brown paper at once into a flame. Owing, no doubt, to the interruption caused by the gallery over the jury box, the set of the main current is down the opposite corner of the court. Its course is readily made visible by means of a small balloon anchored to the desk below the Bench by a thread about 2 feet long. The balloon is kept by the current in a position which causes the thread to maintain an angle—almost always of many degrees, and sometimes of more than 45 degrees—with the perpendicular. The jury, though they frequently have good reason to complain, are thus entirely out of the track of the worst of this current, and it is mostly deflected from the Bench by the canopy, with the further aid, in some cases, of a screen.

The evil is greater in some courts than in others. No. 3, which has been referred to in connection with the trial of *Priestman v. Thomas*, is one of the best, and the adjoining court, No. 4, perhaps the worst. The condition of this latter court was the occasion of much serious illness last spring. In every court the intensity of the evil varies from time to time, occasionally ceasing altogether, and then suddenly becoming once more almost intolerable—indeed quite so, except to persons very exceptionally constituted.

If any attempts have been made to remedy evils which were felt from the very first moment that the courts were occupied, and fully admitted many months ago, such efforts have entirely failed of effect; but others will have to be made until success is achieved, since it is quite impossible that the present state of things can be indefinitely endured. Some real and honest exertion should be at once made to mitigate now, and eventually cure, the mischievous evil which has been described, which is a very serious one indeed to many people, and is the subject of unceasing complaint on all sides.

### THE DUOMO, FLORENCE.

THE new façade of the cathedral has been uncovered. Over the central door is a bas-relief of Our Lord in glory, surrounded by angels, blessing the city. Directly under the great rose window is a large statue of the Blessed Virgin, holding the Infant Saviour in her arms. The niche in which this statue is placed is decorated with twisted columns, inlaid with mosaics of red, gold, and green. On each side are ranged the Twelve Apostles in separate niches. In the arch of the centre door is a fresco, representing the Virgin receiving oblations, with the lilies symbolical of the city at her feet. This fresco will, eventually, be replaced by a mosaic of the same subject. A provisional model of the two systems for completing the topmost part has been placed over each wing. The tricuspidal, or pointed form, is placed to the right of the great door; and on the left side, nearest to Giotto's tower, is the basilicata, which is generally considered to be the most in keeping with the character of the edifice. Public opinion is much divided on this question. On the architrave of the centre door is the coat of arms, carved in the stonework, of the late Pius IX., who gave 3,000 frs. and a precious mosaic towards the building fund. To the right are the arms of the House of Savoy, who contributed 100,000 frs. To the left those of the House of Lorraine, who gave 42,000 frs. and all the woodwork. Besides these are several other coats of arms of the principal donors, also carved on the stonework, amongst others those of the Earl of Crawford and Balcarres, Prince Demidoff, Signor Peruzzi, late Syndic of Florence, and the Archbishops Limberti and Cecconi. The entire expense of the façade up to the present time has not exceeded 900,000 frs. In the bank there remains 40,000 frs. towards the completion of this grand work.

### THE BUILDINGS OF BARI.

THE following account of Bari (the original Bari of the West) appears in the *Guardian*, and forms part of Dr. Freeman's series, "Iter ad Brundisium":—

Bari seems, at least in its history, as much Greek as Italian or Norman. It would seem neither unnatural nor unpleasant if Greek were still the tongue of the seafaring folk of Bari, much as a Norman in his own land often carries an air about him which would make Danish seem a much more natural speech for him than French. But the great buildings of Bari belong to that mixed Norman and Italian style of which we have already seen something at Bitonto. The architectural attractions of the city are chiefly to be found in two great churches and one smaller one. The castle, standing by the sea, should have its landward side walked round, and the walk will reveal much of picturesque outline and a little of good detail. But it is the churches, above all the great abbey of St. Nicolás, which are the glory of Bari. They all lie in the old town by the sea; the old town of narrow



and crooked streets, in which it does not much matter which way you go, you are sure to come either to the castle or to one of the churches before very long. Very different are things in the new town, which we may rejoice in as we look at it as a sign of Bari's abiding or renewed prosperity, but which can raise no feelings of pleasure on any other ground. Its streets, crossing each other at right angles, are indeed carefully dedicated to the worthies of Bari; but, unless we can always remember which of several perhaps not very familiar worthies watches over each of several angles which are exactly alike, it is easy to take a wrong turn and to put oneself under the care of Andrew of Bari when we ought rather to be commending ourselves to Robert. And under either protection we yearn in the wide straight streets for some physical shelter from the Apulian sun, and wonder why modern Rome, modern Athens, and modern Bari should have so much less common sense than Bologna, Padua, and Corfu had in days long past. Still amid this rectangular labyrinth the sea is a help on one side, while on another the tall tower of the metropolitan church of St. Sabinus beckons us into the older streets, whose narrowness and crookedness at least supply shade. That tower, one of the tallest and stateliest of Italy, we naturally assume to be a detached campanile, without a fellow and standing apart from its confederate buildings, church and baptistery. So it doubtless would be in a purely Italian city; but here we are in the city where the Norman displaced the Greek. The two great churches of Bari, like that of Bitonto, have their towers wrought into the building in Norman fashion, and at the *duomo* the great round baptistery is also merged in the same mass with the church and its towers. Both of the great churches of Bari have east ends of the same kind as that at Bitonto; the apses are swallowed up; the place where the great apse should be is marked by a single splendid Romanesque window. The eastern towers of St. Nicolas have never been carried up; at St. Sabinus the southern one has perished, but the northern one still soars in all its majesty, thoroughly Italian in its conception, but rather to be called Norman in its detail. St. Nicolas has also another pair of unfinished towers at its west end, standing at once beyond the aisles as at Wells and Rouen, and in front of them as at Holyrood. They flank a grand Italian front which one would think would be finer without them. These western towers are absent in the metropolitan church; but that has a most perfect octagonal cupola over the crossing, the grouping of which with the two lofty eastern towers, if there was any point from which it could really be seen, must have been wonderful. Thus in both churches something of a German outline has either been consciously brought in or has been incidentally stumbled on. The four towers of St. Nicolas, the octagon and eastern tower of St. Sabinus, will easily find Rhenish fellows, though we should perhaps have to go as far as Angoulême for a single tower of equal majesty mourning over a vanished brother. In other points the external arrangements of the two great churches of Bari have much in common. The rose windows, the coupled windows, the blank arcades, are much the same in both. So is the choice of animal forms for the fanciful supports of columns. In most places the lion discharges that function—in a building designed by lions we should doubtless see something different. So we do here at Bari, where the solid forms of the *pachydermata* are, perhaps discreetly, preferred to the lighter *carnivora*. The elephant, we think, is to be found in both churches, and the huge earth-shaking beast is represented so as to remind us both of Pyrrhos and of Hannibal; some have the smaller ear of India, some the larger of Africa. The hippopotamus appears only in the west front of St. Nicolas. Had the daring shipfolk who bore away the saint's bones from Lykia made their way to the Nile also?

When we pass the threshold of the two buildings we see that their fate in modern times has been very different. St. Sabinus has suffered much as Bitonto has suffered. The upper part of the building is hidden in just the same fashion, and ugly tricks have been played with the columns and their capitals. St. Nicolas, on the other hand, has been left comparatively alone. The chief changes which it has undergone must have taken place not very long after the original building. The original plan was much the same as that of Bitonto—three arches from columns, a massive pier, then three more arches from columns. But this arrangement was disturbed at an early time by throwing three spanning arches across the nave. The effect is so striking that we can hardly regret their presence; but it is perfectly easy to see that they are insertions, and, though they are essentially of the same style, yet they differ in their details from the original columns. These last all approach more or less to the Corinthian type; in the under-church the patterns are more varied. Here are still the wonder-working relics of St. Nicolas, and the balsam or "manna" which flows from them may still be drunk. In the *duomo* the under-church has been restored out of all ancient character, but it still keeps an ancient Byzantine picture.

As so often happens, the secondary church of Bari altogether surpassed the mother church in historic fame and local honour. To ourselves, the fact in its history which comes home most nearly is that it was here that Urban held his council, here that Anselm, to the satisfaction of all Western minds, refuted the creed of the East, here that he interceded with the pontiff and the assembled

fathers on behalf of the king who had wronged him. Here, too, it was that the keen eye of English Eadmer spied out on the shoulders of the Archbishop of Beneventum the splendid cope which is no longer to be seen at Beneventum. Such little touches in those days often brought the ends of the world together in a way to which in our days of more general intercourse nothing answers. When French was the polite language alike at Dunfermline and at Jerusalem, when the Latin-speaking clerk was at home in any corner of the West, when the few men of the West who had learned Greek spoke it so that a Greek could understand them, when men passed to and fro between the civil services of England and Sicily, communication between distant parts of Europe was in some ways easier than it is now. Bari, one of the chief places for setting out on crusades, must for a long time have been a thoroughly cosmopolitan city. We do feel that the ends of the earth have combined to meet at Bari, when we find the place of honour in the church of St. Nicolas at Bari held by a princess of Bari, who became queen of the greatest Slavonic kingdom. Emblematic figures of Bari and Poland support the tomb of Queen Bona, and her epitaph describes her husband Sigismund, the first of that name, as not only the mighty king of Poland, but Grand Duke of Lithuania, Russia, Prussia, Mazovia, and Samogitia.



Messrs. Blomfield, Scott, and Street.

SIR,—Mr. A. E. Street is misinformed. Heslerton vicarage had been finished and inhabited some time when I was there, in June 1831, *i.e.* in his father's lifetime.

At Weaverthorpe (which by-the-by is a twelfth-century church) the vicar complained to Sir T. Sykes that there was no felt under the lead (as stipulated for). Sir Tatton came with Street, who averred the vicar was mistaken; but on their mounting a ladder the vicar was found to be right.

At the church of Luttons Ambo (which is the title of the united parishes), the brass screen was painted *by Street's direction*; and the churchwarden—a large farmer—told me there was not a ladder in the parish long enough to reach a broken bell-rope.

St. John's, Torquay, is no doubt right now; but still the mortar in the outer courses of the exposed south-west walls (used in spite of warning) *had* to be replaced by cement.

Mr. Drew has a short memory. *Less than a month ago* he stated that the crypt drains in Dublin Cathedral had no outlet till he provided one. Whether he knows it or not, there *were* above fifty letters written to Street about the completion of the building, and left unanswered—written, on behalf of Mr. Roe and the chapter, by a gentleman who is now abroad. Perhaps Mr. Drew will deny that the Caen stone on the north side is decaying, or that the *strong-room* had a plaster ceiling!

I am glad to have started a discussion sure to be beneficial, and must thank you, sir, for opening your columns to one who is

Dec. 8, 1883.

NOT AN ARCHITECT.

## LEGAL.

Court of Session, Edinburgh.  
(Before Lord M'LAREN.)

ANDERSON AND BROWNE *v.* J. B. HOWARD.

This action has been taken out of court. It was raised by Messrs. Anderson & Browne, architects, to recover from Mr. J. B. Howard payment of 542*l.* 10*s.* 6*d.*, in respect of architects' fees, commission, and outlay, said to have been incurred on the defender's employment in connection with the building of the new Lyceum Theatre, Grindlay Street, 462*l.* 10*s.* of the sum claimed being in respect of designs, &c., for the new theatre, at the rate of 2½ per cent. on the estimated cost of 18,500*l.* It was alleged that on February 12 the defender terminated his employment of the pursuers, in consequence of their rejection of his proposal to appoint a London gentleman—Mr. C. J. Phipps—to be joint architect, instead of consulting architect, as had been arranged. The defender maintained that his instructions to the pursuers were to prepare plans for the building at a cost not exceeding 15,000*l.*, and to be ready for occupation not later than September 1; that after the lapse of six weeks they submitted sketch-plans at a cost of 3,500*l.* beyond the sum named, and defective and insufficient in many of the details requisite in a theatre; and that as they then rejected a renewed offer to appoint them joint architects with Mr. C. J. Phipps, architect, London, he entrusted the preparation of plans and the construction of the building to that gentleman. Messrs. Anderson & Browne have accepted 300*l.*

Messrs. Blomfield and Street will, on Tuesday next, set the clock and bells of the New Law Courts in motion, at 11.30 A.M.



### CHURCH BUILDING AND RESTORATION.

**Bispham.**—The rebuilding of the parish church, Bispham, Lancashire, is now completed, and the part just finished comprises the nave and south porch. The chancel, organ chamber, and vestry were commenced some two years since. The old foundations of the nave and tower have been adhered to throughout, the addition to the former comprising one bay at the east end. Accommodation is provided for 311 persons. Externally the church is faced with Yorkshire parpoints and Longridge ashlar masonry, and internally with Stourton stone. The roofs are in one span, with open-framed principals, the ceilings boarded. The chancel windows, and several of nave, are filled with stained glass. The church is one of the most effective and striking in appearance in the Fylde district. The rebuilding throughout has involved an outlay of about 4,000*l.* under the superintendence of the architect, Mr. John Lowe, F.I.B.A., Manchester.

**Glasgow.**—Oatlands Church has been endowed. It was dedicated in October, and has been designed by Mr. John Honeyman, F.R.I.B.A. The style is Gothic. In the lower part of the front are two richly-sculptured entrance doorways. Above these are four pointed windows, and in the upper part of the gable is a large circular window. Flanking the gable are two large massive turrets. The side, which is plainer in character than the front, is relieved by a gable and belfry. The interior is 83 feet long and 48 feet broad, and is divided into a central and two side aisles by rows of iron columns supporting the roof and side and end galleries. Accommodation is provided for 900 persons. The interior has been decorated by Messrs. A. & J. Scott.

### NEW BUILDINGS.

**Baths, Pollokshields.**—The Pollokshields Baths Company Limited, are about to erect baths. The front elevation of the buildings is two storeys in height. The principal entrance is placed in the centre of the main building. On either side of it in the upper floor are two large oriel windows in connection with the reading and billiard rooms, which each measure 34 feet by 24 feet. These windows embrace one side of their respective apartments. The east portion of the front has an entrance to the bathmaster's house, which is on the upper floor. There is also in this portion an inclined passage leading to the furnace-rooms, washing-house, stores, &c., which are all in the basement. Entering through a vestibule, 8 feet square, having at either end double-folding, glass-panelled doors, the entrance hall is reached. It measures 21 feet by 18 feet, and in the centre of it is the first flight of the stair leading to the upper floor. The hall communicates direct with the swimming-pond, 75 feet long by 35 feet wide, and running from 6 feet 6 inches to 3 feet 6 inches of depth of water. The pond is constructed of concrete, and the sides and bottom are covered with white enamelled tiles. Provision has been made for easy access to the walls in case of any accident or leakage. At the four corners of the pond are recessed steps for facilitating access to the water. Attached to the sides of the pond at the water level are ten shell-pattern basins, which will act as overflows. The floor round the pond is covered with encaustic tiles, and all round the three sides are placed dressing-boxes for gentlemen, and also costume apartments for ladies. Washing-rooms, provided with douche, spray, needle, and other baths and conveniences, are placed at either end of the pond. Above the boxes is a gallery giving large accommodation for spectators during competitions, and which may serve as a comfortable lounge on ordinary days. Separate shoots communicating direct with the washing-house beneath are conveniently placed for receiving wet towels, &c. The roof over the pond is of open timber construction, and the tie-beams and posts will be made ornamental features. Its height above the floor of the pond is 28 feet. At the west end of the pond is placed the gymnasium, measuring 24 feet by 17 feet. The bathmaster's room is so situated that it commands the entire area of the swimming-pond house. On the left of the entrance-hall is the boot-room, and to the east of it again are the private plunge-baths and ladies' dry costume room, 15 feet by 14 feet. To the extreme east are the apartments in connection with the Turkish baths. These consist of (1) cooling-room, 30 feet by 20 feet, having semicircular ceiling with enamelled glass roof lights; (2) tepidarium, or hot-air room, 20 feet square, having domed roof with starlights; (3) sudatorium, or hottest room, 9 feet square, treated in a similar way; (4) shampooing-room, 10 feet by 7 feet; (5) lavatory, 12 feet by 7 feet; (6) Russian bath-room, 9 feet square. The Turkish apartments are heated by flues running round them. These give a very large area of heating surface, and enable the apartments to be heated to from 120 to 200 degrees without destroying the purity of the air. The fresh air before being admitted into the room is heated to a high degree. Great attention has been paid to the lighting and ventilating of this and every other part of the establishment, these being so necessary for comfort and successful sanitation. To the right of the entrance-hall is the card-room, 24 feet by 15 feet, with lavatory. All the departments—viz., swimming-pond, Turkish bath, private

baths, and reading-room, with adjuncts—are separate and complete in themselves, and have their own approaches. The plans for the baths have been prepared by Mr. James Hamilton, I.A., 132 West Regent Street, Glasgow.

### ARCHÆOLOGY.

**Biron Brass, Manchester.**—A paper on some fragments of an old brass in the Lady Chapel of the Manchester Cathedral was read by the Rev. E. F. Letts at a late meeting of the Lancashire and Cheshire Antiquarian Society. Tracings of perfect figures on the brass, which is a memorial of Sir John Biron, were found in the Chetham College, and these Mr. Letts compared with the matrix still existing in the Lady Chapel. The shape of the crest enabled him to identify it as that of the Biron family, of Clayton, the ancestors of Lord Byron. An oblong label over the lady's head was very puzzling, but the figures of three sons and five daughters at the base showed that the parents were Sir John Biron and Dame Margery his wife, who were living in 1460 or 1470. She was daughter of Sir John Boothe, of Salford, whose crest at this period was a double one—a Catherine wheel and an Agnus Dei. This accounted for the oblong label. Mr. Letts gave an account of the knight's career, and concluded with the hope that the brass might be restored.

### GENERAL.

**Sir Frederick Abel, C.B., D.C.L., F.R.S.**, has been elected chairman of the Council of the Society of Arts, in succession to the late Sir William Siemens.

**Mr. Lance Calkin** has been elected a member of the Incorporated Society of British Artists.

**The Marquis of Lorne** will open the Exhibition of French Art at Glasgow on the 18th inst. It is anticipated that the exhibition will be rich in examples of French furniture.

**Messrs. W. & A. Beresford Pite**, of 5 Bloomsbury Square, have been appointed by the Guardians of St. Giles and Bloomsbury as their architects to carry out the additions to their workhouse in Short's Gardens, Endell Street, W.C.

**Plans by Mr. Milburn**, architect, of Sunderland, have been selected for a Board school to be erected at East Boldon.

**The Royal Archæological Institute** will, next year, visit Newcastle-on-Tyne.

**The Report** just presented to the Metropolitan Board of Works as to the plans deposited for railways and other works in the metropolis for the ensuing session contains a list of forty-seven schemes, viz., twenty-one for railways, thirteen tramways, two electric lighting, and eleven other works affecting the metropolis.

**Mr. William H. Thorp**, of Leeds, has now in the press "An Architect's Sketch-Book at Home and Abroad." The letterpress will be illustrated by seventy-five full-page illustrations of subjects from England, Belgium, and the Moselle. In the part given to England many of the views are of Yorkshire castles and halls; in that to Belgium, the Flemish architecture of the old cities is very fully illustrated; and the mediæval buildings existing on the banks of the Moselle make up the remainder of the work, which is likely to be a success.

**A Part of the Parapet** of the large tower of Lincoln Cathedral fell during the gale on Tuesday.

**Messrs. Cassell, Petter & Galpin** have issued a new edition of their quarto "Illustrated Catalogue," which exemplifies the perfection of modern woodcuts.

**A Mission Hall**, which has been adapted by Messrs. Smith & Brodrick from a grammar school, was opened in Hull by the Archbishop of York on Tuesday; and on Saturday last the Hull Borough Asylum, which was designed by the same architects, and has cost about 72,000*l.*, was opened, and formally transferred to the Corporation.

**The Scheme for a London Central Fish Market**, sent to the International Fisheries Exhibition, and which was awarded a fifty-guinea prize, is to be officially published. Mr. H. H. Bridgman is the architect.

**Messrs. S. Snell & Son** have prepared plans for the extension of the Hull infirmary, which have been adopted. It is proposed to extend the building laterally, and to isolate the centre, thus separating the administrative from the hospital department; also to erect a building for out-patients, with an opening to Brook Street. The proposed extensions are estimated to cost 38,000*l.*

**The Alexandra Palace and Grounds.**—Notification is given of an intended application to Parliament next session by the London Financial Association (Limited) for leave to bring in a Bill for the repeal, modification, or amendment of certain sections of the Muswell Hill Estate and Railways Act, 1866, and of the Alexandra Palace Act, 1877. Power will also be sought to enable the Association, or the owners for the time being of the Alexandra Palace and the lands annexed thereto, to sell or otherwise deal with the palace and lands free from the restrictions imposed by the Acts mentioned, or subject to other provisions which may be prescribed by the Bill.



# SUPPLEMENT

TO THE

# ARCHITECT.

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, DECEMBER 15, 1883.

### TENDERS, ETC.

*\*\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.*

*\*\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—“Contract Supplement to THE ARCHITECT.”*

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### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 10 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

WALMER.—Jan. 21.—Designs are invited for Laying Out the Estate of St. Clare for Building Purposes. Messrs. W. & T. Denny, Walmer.

### CONTRACTS OPEN.

ACCRINGTON.—Dec. 17.—For Construction of Brick and Pipe Sewers. Mr. E. Knowles, Borough Surveyor, Town Hall, Accrington.

ACCRINGTON.—Dec. 20.—For Extension of Oak Street School. Mr. W. H. Bell, Surveyor, 18 Bank Street, Accrington.

ASHBOURNE.—Dec. 17.—For Repairs to Railway Tavern. Mr. George Marshall, Ashbourne.

AUDENSHAW.—For Conversion of Houses into Stores, Offices, &c. Mr. J. H. Burton, Architect, Ashton-under-Lyne.

BALLATER.—Jan. 17.—For Construction of Stone Bridge over the River Dee. Messrs. Jenkins & Marr, C.E., 16 Bridge Street, Aberdeen.

BLYTH.—Dec. 21.—For the Erection of the Thomas Knight Memorial Hospital at Blyth. Mr. J. Hogg, Architect, 4 St. Mary's Place, Newcastle-on-Tyne.

BRANDERBURGH.—Dec. 19.—For Building House and Business Premises. Messrs. A. & W. Reid, Architects, Elgin.

CHIPPING NORTON.—Dec. 18.—For Construction of Goods Shed. Plans, &c., at the Engineer's Office, Paddington Station.

COCKERMOUTH.—Dec. 15.—For Building Bank Premises. Messrs. T. L. Banks & Townsend, Architects, 23 Finsbury Circus, E.C.

COLCHESTER.—Dec. 18.—For Building Wood-chopping Shed at Workhouse. Mr. A. M. White, Clerk to the Guardians, Colchester.

CONSETT.—Dec. 15.—For Building Two Blocks of Seven Cottages, One Block of Fifteen Cottages, and Additions to Twelve Cottages, Leadgate. Plans at the Offices of the Consett Iron Company, Consett.

COVENTRY.—Dec. 19.—For Building Vaccination Station and Offices. Mr. T. W. Whitley, Architect, Coventry.

COWLING.—Dec. 15.—For Building Parsonage House and Offices. Messrs. Holland & Son, Architects, Newmarket.

DUKINFIELD.—For Foundations of Fireproof Mill. Messrs. Stott & Sons, 4 Corporation Street, Manchester.

DUMFRIES.—Dec. 31.—For Extension of Bridge over Highway at Passenger Station. Plans at the Engineer's Office, St. Enoch Station, Glasgow.

ECCLESFIELD.—Jan. 2.—For Heating Hillsborough Board School on the Low Pressure System. Messrs. Wilson & Masters, Architects, Sheffield.

ELGIN.—Dec. 24.—For Building Town Hall. Messrs. Matthews & Mackenzie, Architects, Aberdeen.

GREAT BROUGHTON.—Dec. 15.—For Building Chapel and School. Messrs. Eaglesfield & Son, Architects, Maryport.

GREAT CROSBY.—Dec. 24.—For Building Mortuary and Disinfecting Store. Mr. M. J. Hore, Clerk to the Local Board, Great Crosby.

GREENOCK.—Dec. 19.—For the Works of the Third and Remaining Section of the Municipal Buildings. Messrs. H. & D. Barclay, Architects, 136 Wellington Street, Glasgow.

GUISELEY.—Dec. 21.—For Repairs to Farmhouse and Premises. Messrs. Cundy & Sons, Surveyors, 7 East Parade, Leeds.

HALIFAX.—Dec. 21.—For Building Liberal Club. Mr. J. Farrar, Architect, Crossley Buildings, 29 Northgate, Halifax.

HULL.—Dec. 20.—For Supplying and Laying Cast-Iron Pipes (123 yards). Mr. J. Fox Sharp, Borough Engineer, Town Hall, Hull.

IKLEY.—For Additions to Hydropathic Establishment. Mr. James Atkinson, Architect, Ikley.

KING'S LYNN.—Dec. 22.—For Building Villa and Offices. Mr. E. J. Colman, Architect, Market Place, King's Lynn.

LEWISHAM.—Dec. 28.—For Building Swimming-baths, &c. Messrs. Wilson, Son, & Aldwinckle, 2 East India Avenue, Leadenhall Street, E.C.

LLANISHEN.—Dec. 31.—For Construction of Large Storage Reservoir with Embankments, Valve Well, Culverts, Gauge Basins, &c. Mr. J. A. B. Williams, C.E., Queen's Chambers, Queen Street, Cardiff.

LLANSAMLET.—Jan. 7.—For Building School at Penri Green. Mr. Rees Llewellyn, Architect, Llansamlet.

MANCHESTER.—Dec. 17.—For Construction of a Subway at Smithy Bridge Station. Plans at the Engineer's Office, Hunt's Bank, Manchester.

OSWESTRY.—Dec. 18.—For Construction of Railway Station. Plans at Engineer's Office, Paddington Station.

PAR.—Dec. 20.—For Erection of Station Buildings. Plans, &c., at the Office of the Engineer, Plymouth Station.

PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

RIPON.—Dec. 19.—For Building Railway Inspector's House. Mr. William Bell, Architect, North-Eastern Railway, York.

SEACOMBE FERRY.—Dec. 20.—For Building Workshops. Mr. A. Salmon, Surveyor, Public Offices, Egremont.

SEATON.—Dec. 15.—For Building Three Cottages, Houses, &c. Mr. J. Howe, Architect, 13 Bridge Street, Workington.

SHEFFIELD.—Dec. 15.—For Retort House and other Buildings for a Gas Works at Rockingham Colliery. Messrs. Newton, Chambers & Co., Thorncliffe Ironworks, near Sheffield.

ST. MARY BOURNE.—Dec. 17.—For Works at Parish Church. Mr. John Hillary, Longparish, Hants.

SWANSEA.—Jan. 23.—For Erection of New Blocks and Extensions and Alterations to the present Swansea Union Workhouse. Messrs. Blessley & Aspinall, Architects, Cardiff.

THORNLEIGH.—Dec. 19.—For Erection of Stable Buildings, &c. Mr. S. Shaw, Architect, Kendal.

WEST WALKER.—Dec. 22.—For Extensive Additions and Alterations to the Board Schools. Mr. John Johnstone, Architect, 6 Clayton Street West, Newcastle-on-Tyne.

WIBBERLEY.—Dec. 20.—For Construction of Covered Service Reservoir. Mr. Alfred Moore, C.E., 5 Clarence Street, Albert Square, Manchester.



## TENDERS.

## BELPER.

For Alterations and Additions to Workhouse, Belper. Mr. GEORGE EYRE, Architect, Codnor, West Derby. Quantities by the Architect.	
Hingley . . . . .	£199 10 0
Bodell & Son . . . . .	194 4 0
Walker & Son . . . . .	178 0 0
Loomes & Ryde . . . . .	177 0 0
WHELDON BROS. (accepted) . . . . .	176 0 0

## BLACKBURN.

For Two Entrance Lodges, for the Blackburn and East Lancashire Infirmary. Mr. ANGELO W. R. SIMPSON, Architect, Richmond Chambers, Blackburn. Wm. & T. Arkwright, Blackburn. Kenyon & Moulding, Blackburn. Whittaker, Blackburn. Clegg, Accrington. Higson & Sons, Blackburn (accepted).	
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## BLACKPOOL.

For Street Improvement Works, Blackpool. Mr. T. SUNDERLAND, Borough Surveyor.	
Moxham . . . . .	£492 13 1
Strickland . . . . .	491 7 7
Speight . . . . .	447 8 9
Taylor . . . . .	393 18 9
Lewtas . . . . .	352 16 1
WALKDEN & CO. (accepted) . . . . .	343 5 2
Owen (withdrawn) . . . . .	266 3 2

## BOGNOR.

For Extension of Groynes, Bognor. Mr. W. L. BARRETT, Surveyor.	
Nos. 1, 5 and 6. . . . .	£200 0 0
TATE, Bognor (accepted) . . . . .	200 0 0
Nos. 18 and 19. . . . .	260 0 0
TATE (accepted) . . . . .	260 0 0
New Groynes. . . . .	400 0 0
For Pipe Sewers, Steyne Street and London Road, Bognor. Mr. W. L. BARRETT, Surveyor.	
Parsons, Brighton . . . . .	£180 0 0
Dearle, Eastbourne . . . . .	180 0 0
Tate, Bognor . . . . .	125 0 0

## BOURNEMOUTH.

For Laying Brick Sewer, Gervis Place, Bournemouth. Hoare Bros., & Walden, Bournemouth. . . . .	£434 0 0
James, Bournemouth . . . . .	377 1 0
Whetham, Weymouth . . . . .	324 0 0
SAUNDERS & WHITE, Bournemouth (accepted) . . . . .	244 0 0
Surveyor's estimate . . . . .	455 12 0
For Fencing Eastbourne Park Estate, Pokesdown, Bournemouth. Mr. C. T. MILES, Surveyor.	
Ayles, Ringwood . . . . .	£377 8 0
Hyde, Christchurch . . . . .	367 7 6
Kattle, Parkstone . . . . .	229 16 0
POND, Corfe Mullen (accepted) . . . . .	199 10 3
Road-making. . . . .	
Ayles, Ringwood . . . . .	178 2 6
Pond, Corfe Mullen . . . . .	144 6 3
SAUNDERS & WHITE, Bournemouth (accepted) . . . . .	123 17 3

## BRIGHTON.

For Building Four Workmen's Cottages at the Goldstone Waterworks, and Two Cottages at the Redhill Reservoir, Brighton. Mr. P. C. LOCKWOOD, C.E., Surveyor.	
Newnham . . . . .	£4100 0 0
Ansombe . . . . .	3,970 0 0
W. & T. Garrett . . . . .	3,950 0 0
Bruton . . . . .	3,722 0 0
Barnes . . . . .	3,640 0 0
Holloway Bros. . . . .	3,595 0 0
Nurcombe, Butcher & Co. . . . .	3,564 0 0
Chappell . . . . .	3,525 0 0
Marshall . . . . .	3,500 0 0
Lockyer . . . . .	3,407 0 0
Parsons . . . . .	3,399 0 0
Peters . . . . .	3,275 0 0
Longley . . . . .	3,240 0 0
Hudson, Kearley & Co. . . . .	3,138 0 0
Taylor . . . . .	3,098 10 0
WEBBER (accepted) . . . . .	2,775 0 0

## BROMLEY.

For Drainage Works at the Workhouse at Bromley.	
Roby . . . . .	£279 0 0
Derby . . . . .	278 0 0
Heiser . . . . .	266 0 0
Shepherd . . . . .	220 0 0
HAWKINGS (accepted) . . . . .	162 0 0

## DERBY.

For Execution of Works in Cedar Street, Derby. Mr. THOS. COULTHURST, C.E., Borough Engineer, Full Street, Derby.	
Cope, Ripley . . . . .	£176 17 4
Smith & Turton, Derby . . . . .	166 11 4
Tomlinson Bros., Derby . . . . .	129 19 4
TODD, Derby (accepted) . . . . .	124 5 4

## GERRARD'S CROSS.

For Completing Two Detached Residences, Gerrard's Cross, Buckinghamshire, for Mr. C. Gover. Mr. STANLEY PARKER, Surveyor, 427 Edgware Road, W. KEARLEY, Uxbridge (accepted) . . . . .	£330 11 0
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## GLYNCEORRWG.

For Building Dwelling-house and Shop at Cymmer, Glynceorwg. Mr. THOMAS JENKINS, Architect, Neath.	
Highest Tender. . . . .	£520 0 0
Jenkins, Swansea . . . . .	520 0 0
Lowest Tenders. . . . .	
George, Briton Ferry . . . . .	432 0 0
Lloyd, Cymmer (accepted) . . . . .	425 0 0

## FOLKESTONE.

For Building School for 700 Children, with Teacher's Residence and Boundary Walls, Black Bull Road, Folkestone. Mr. JOSEPH GARDNER, Architect, Folkestone. Quantities by the Architect.	
Mercer, Folkestone . . . . .	£6,942 0 0
Hatton & Co., London . . . . .	6,890 0 0
Unwin, Folkestone . . . . .	6,258 0 0
Marriott, Wellingborough . . . . .	6,083 0 0
Baker, Folkestone . . . . .	5,995 0 0
Foster & Dicksee, Rugby . . . . .	5,950 0 0
Adcock, Dover . . . . .	5,850 0 0
Clemmans, Folkestone . . . . .	5,779 0 0
Denne, Deal . . . . .	5,694 0 0
Brooks, Folkestone . . . . .	5,649 0 0
Wise, Deal . . . . .	5,600 0 0
Petts & Son, Folkestone . . . . .	5,580 0 0
Webster, Folkestone . . . . .	5,550 0 0
Stiff, Dover . . . . .	5,531 0 0
Willis & Co., Dover . . . . .	5,500 0 0
Welch & Co., Dover . . . . .	5,489 0 0
Prebble, Folkestone (accepted) . . . . .	5,360 0 0

## HALIFAX.

For the Construction of Pipe Sewer, Phoebe Lane, Halifax.	
Mann & Sutcliffe . . . . .	£172 0 0
Hudson & Kitchen . . . . .	161 0 0
Bedford . . . . .	145 0 0
Spink . . . . .	141 0 0
Mann . . . . .	136 0 0
Brook & Son . . . . .	129 0 0
Tyson . . . . .	123 0 0
Bottomley . . . . .	123 0 0
Wilson . . . . .	114 0 0
RENDAL (accepted) . . . . .	103 0 0

## HASTINGS.

For Alterations to the Premises and new Bar Fittings at the Royal Oak Hotel, Hastings. Mr. ARTHUR WALLS, Architect, 27 Chancery Lane, W.C., and 25 Havelock Road, Hastings.	
Reid, Streatham, S.W. . . . .	£385 10 0
Howell & Son, Hastings . . . . .	720 0 0
Walker, Limehouse, E. . . . .	688 0 0
Pewterers' Work. . . . .	
Warne . . . . .	120 0 0
Browning . . . . .	111 0 0
Helling . . . . .	105 0 0
SANDERS & SONS (accepted) . . . . .	92 15 0

## HYDE.

For Additional Storey and Alterations to Felt Hat Works, Hyde, for Messrs. S. Wareham & Co. Mr. JAMES HUNT, Architect, Stockport.	
Wharham, Hyde . . . . .	£1,147 13 8
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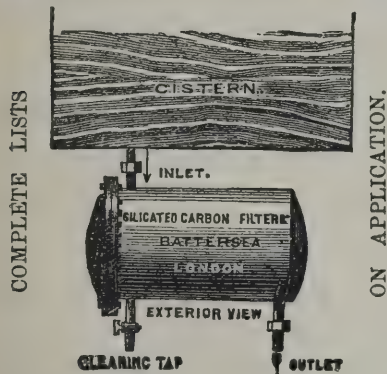
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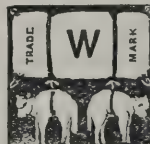
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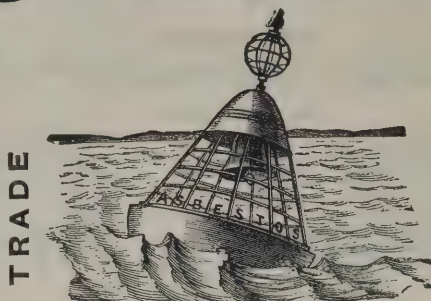
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# The Architect.

## LORD COLERIDGE ON THE CERTITUDE OF ARTISTIC TESTIMONY.



ART, of the kind that is now legally called by the name of "artistic art," is emphatically *not* a thing upon which one man's opinion is as good as another's—a proposition which the whole world of English "artistic artists" will thank the accomplished Lord Chief Justice for affirming with earnestness.

There are some countries where, it is to be hoped, no man of culture would permit himself to imagine that the opinion of a dozen haphazard ratepayers in a jury-box could be considered to be more authoritative upon a delicate question of artistic authenticity than that of a phalanx of Royal Academicians. But it would seem that in England this view is held by many; indeed, as matter of practice in litigation, we shall be told any day that the summing-up of a judge, and the decision of a jury formally delivered, have a value—a real, and not a conventional value—compared with which the "impressions" of highly-cultivated specialists are of no account at all. What is even worse, the doctrine of lawyers is this—that in opposition to the evidence of eyesight from a witness void of understanding the evidence of learning and knowledge has no legal weight. To put the question on the simplest ground, it has just been laid down by high legal authorities that, when a person of intelligence and character, who knows of sculpture technically nothing, can take upon himself to testify that he saw a certain sculptor execute a certain sculpture, it is vain for the ablest professional critics of the sculptor's art to say that the witness must have been mistaken because of the quality of the artwork telling a different tale.

Lord COLERIDGE, on the other hand, says this—and we hope he does not stand alone among English lawyers in his opinion: "The character of genuine works of art is not in my judgment a matter of *opinion*, but a matter of *fact*." To appreciate the distinction which is here made between "opinion" and "fact," it is necessary to observe that these terms are used by Lord COLERIDGE not in a colloquial but in a legal sense. Evidence of fact, or direct evidence, is that which is furnished by a witness who states what he has actually seen or heard, or, for that matter, tasted, touched, or smelt. Evidence of opinion, or expert evidence, is that in which the witness draws conclusions by scientific argument. The value of direct evidence depends very much upon the credibility of the witness and his intelligence. The value of expert evidence depends upon the character of the data relied upon, and the extent of the specialist knowledge which the witness is able to bring to bear upon it. Perhaps one of the best illustrations of the distinction for our readers is furnished by the incidents of those controversies which are known as "light and air cases." The occupier of a certain room alleges that damage has been done to the lighting of his window by reason of a new house opposite being of different form from the old house which it has replaced; and so he wants compensation in money. He "swears," therefore, that he cannot see to do his work, and that he has to light his gas about an hour earlier. Against this evidence a scientific architect produces diagrams whereby he proves that the allegations are impossible—indeed, that the plaintiff might just as well say he had seen a ghost, or had weighed sixteen ounces into a scale, and found they made only three-quarters of a pound. In strict law this is a conflict between evidence of fact and evidence of opinion. Fact gives the evidence of his senses, and what is the use of Opinion saying it cannot be true? Is not the world full of people who try to make us disbelieve our senses? But the philosophy of the matter is obviously this—that in many cases evidence of so-called fact is in reality only evidence of opinion, and that of an inferior quality; so that in such a question, for instance, as the lighting of a room, it becomes plain to a scientific architect that the convictions of an unscientific casual observer are not only not facts, but opinions

that cannot be relied upon. We need only add that if it be seriously meant by lawyers that scientific conclusions are to be discredited, then science must simply wait for the better education of law.

To come now to the question which the Lord Chief Justice had specifically to deal with, we may formulate it thus: Is an experienced critic of art—of painting, of sculpture, of architecture, or of any of the "minor" order of "artistic arts"—to be entitled, or to be not entitled (human fallibility duly considered) to say authoritatively that he *knows* a certain artistic product to be, or to be not, the personal work of a certain artist (suppose him to be deceased), of whose acknowledged personal work a certain specimen is set before him as a criterion? To this question, we need scarcely say, no "artistic artist" would hesitate for a moment to give an affirmative reply. Does an ordinary tradesman understand the goods in his shop? Does one man know another's handwriting? Have we any difficulty in testing the "style" of an author? Why, even one lawyer's letter differs from another lawyer's letter, as one star differeth from another star in glory; and was not Lord COLERIDGE able to distinguish the "style" of Baron HUDDLESTON himself in so dry a thing as the very statement of evidence which was the subject of inquiry—"that learned judge having opposed matters of fact to matters of opinion with the remarkable ability of summing-up which old antagonists at the bar would well remember?" In a word, it is obviously a mere question of what His Lordship called "education" whether a man understands his business or not; and, if a man is properly educated to understand art, then he can read the handwriting of it anywhere, and with so little risk of mistake as to defy almost anything short of intentional and dexterous forgery.

We are not, of course, here discussing the BELT case over again. The legal issue is now a personal one, and it is the abstract question of artistic judgment, as a purely intellectual question, that we have alone to consider. But we cannot help pointing out, as a collateral matter, the error into which, in our opinion, many well-meaning people are disposed to fall in respect of the distinction which the bar and the bench alike have been led to draw between the "sculptor" and the "sculptor's broker." Readers of this journal do not require to be told that if the difference were to be too nicely discriminated between an architect and (we most humbly beg pardon) an architect's broker, where some of us would soon be it were profane to tell. Is it not Sir EDMUND BECKETT (one is always safe in such cases to ask whether it is not Sir EDMUND BECKETT) who lays down the axiom that an artist is one who does his work with his own hand, no matter whose head, if any, may be concerned in it? If we apply this principle—a *fortiori* if we let Sir EDMUND apply it—to certain useful and successful classes or species of architectural practitioners, it is well known that they separate into two distinct divisions or genera—namely, those who have got past the work of the hand, and those who have never come up to it. We may admit for this purpose, of course, that an architect, when an "artistic artist," does his work of composition, and must do it in the very nature of the thing done—indeed, cannot help doing it in the very nature of what does it—with his pencil in his hand. But, with the exception of a few tiresome clients of the clerical-archæological and amateur-pragmatical orders, who in England cares for all this? The object of the typical Englishman who, as he puts the case, is "unfortunately obliged to go into bricks and mortar," is certainly not to hand down to posterity an unquestionably authentic specimen of the hand-work of Mr. NORMAN SHAW or Mr. WATERHOUSE (as these architects well know), or even of such a man as the late Sir GILBERT SCOTT or Mr. STREET, but, in the first place, to get his work so done that his friends may pronounce it well done; secondly, to get it economically done; and thirdly, and too often chiefly, to get it done in his own way, so far as he understands the matter, or can make himself believe that he understands it. Let it be only remembered that this is "a commercial country," and where is the difference between the artist and the artist-broker? In architecture, at any rate, we very much fear, it is not easy to discover where it is. The hand-work of the "assistant," it would be idle to deny, especially when the assistant can "design from sketches," is often very much better than that of the master would be if he had the time to try it, or if he had the head; and the commercial Englishman is perfectly satisfied that it should be so, and indeed all the better pleased to think that, with the work of the expert artist,



he gets also the direction of the experienced man of business. Of the various arts of embellishment—perhaps to be now called “artizan art” by the lawyers—we need only say that the skilled workman and his master take up a still more “commercial” position with the public, and that their work is still none the worse, but all the better.

In sculpture, as we have taken occasion to point out very candidly long ago, the practice of perfunctory art-work is thoroughly recognised; and we may with the same candour now add that the assistantship of a class of highly-trained working artists of comparatively humble station and inferior general culture, who are not produced in this country as they are abroad, has been an element of the utmost advantage in English sculpture of the best class. This fact, indeed, ought not to be disguised, far less disputed. The time is probably coming when natives of our own land may be available for such work; but for the present the art schools of the Continent are better than ours, and this, amongst the rest, is the consequence.

In painting, the authentic work of the master's hand is in England an essential quality of art, while in some other countries it is not so much so, to say the least.

In no case, be it observed, do we defend “art brokerage” as a falsity in art. We cannot help saying that in many instances it is a practice of business which English people are not yet sufficiently ecstatic to dispense with, but to reduce its pretensions to a question of clearly discernible handwriting is what no experienced critic can ever fail to be able to do.

### THE PICTURE GALLERIES.

THE Christmas visitors to town will find an ample programme before them in the way of picture galleries and art collections of all kinds. Among the most popular will probably be the sketches of Thames scenery, which Mr. KEELEY HALSWELLE shows at Messrs. AGNEW'S, the result of twelve years' life in a house-boat and study face to face with the dear old river-side. The big pictures exhibited from time to time in the Royal Academy, Grosvenor Gallery, and elsewhere would hardly have prepared one for the variety of effect and season the painter has noted in the kind of artistic shorthand, the clever generalised style of these sketches. There has been so much of the proverbial English bad weather about Mr. HALSWELLE'S large Thames pictures that one is glad to find the sun shining in these sketches, and to realise what a quantity of capital material for a more varied range of treatment through change of season and of hour the painter has here gathered. Mr. HALSWELLE'S experiences of house-keeping on board a house-boat have been set forth in some of the weekly periodicals, and just at present form one of the topics in social circles.

Another favourite exhibition will be the complete little gathering, in the Fine Art Society's smaller room, of the mezzotint engravings of our venerable Academician, Mr. COUSINS. It has fallen to this excellent artist to translate into one of the most popular forms of engraving the works of some of our most popular painters—LAWRENCE, LANDSEER, REYNOLDS, MILLAIS, LEIGHTON. The method which COUSINS first learnt of S. W. REYNOLDS became in his hands an elaborate and somewhat mixed mode; there is something of the line engraver's line and dot and regulated stroke as well as the velvety stains and outlineless bloom of the mezzotint scraper. But Mr. COUSINS has had to work for the large demand of the present-day purchasers, not to provide a plate for a few happy collectors of splendid proofs. His fine hand as a draughtsman showed itself early in pencil portraiture of a sure and delicate kind, of which specimens are in this little exhibition. As an interpreter of touch he is happiest with REYNOLDS and LAWRENCE—with the latter on the whole happiest, and also with Sir F. LEIGHTON and with GREUZE. One or two of the LANDSEER plates are also very exquisite, notably *The Piper and Pair of Nut Crackers*. In reproducing Sir JOSHUA REYNOLDS the competition with the splendid mezzo engravers of REYNOLDS'S own time raises comparisons difficult to meet, but it may be remembered how Mr. COUSIN'S prints were received with quite a burst of applause when in COLNAGHI'S window they first appealed to the public.

Still on his way up Pond Street the visitor may come upon novelties, look in at Messrs. DOWDESWELLS, and see the

clever Alpine studies in oil and water-colour by Mr. J. M. DONNE, who threatens to win his way like ELIJAH WALTON among lovers of Swiss mountains, and that by a more veracious art if a less poetic. Then at the galleries of the Mediæval Art Society are Windsor tapestries from the Royal factory, excellent for weaving and disappointing in design, too much given to a hybrid style betwixt late Flemish and French manners, and the pictorial no-style of English history painting of the E. M. WARD and FRITH kind. Upstairs, a charming little special loan exhibition of old English wrought-iron work has been got together by Mr. DE WILDE, who shows also some capital specimens, lamp brackets and other things, from his own forges, he being one of a company of masters in handicraft of artistic worth who have studios in connection with this Society. Mr. ROGERS, the well-known master of wood-carving, shows a collection of old specimens and a few of modern work.

In a week's time the REYNOLDS pictures at the Grosvenor Gallery will be on view, and then the annual show of Old Masters, and the works of Mr. POOLE, R.A., at the Academy.

Meantime the Institute of Oil Painters, whatever that body may be—apparently those members of the Water-Colour Institute who are adept in both mediums—must be congratulated on a brilliant first inaugural exhibition of oil pictures. The handsome Piccadilly galleries have attracted not only the strength of the Institute, but outsiders of repute. Not only Messrs. LINTON and E. T. GREGORY and STANLAND, GREEN, SMALL, CLAUSEN, and other men of mark within the body contribute of their good work, but Mr. ALMA TADEMA sends a particularly finished interior with marbles *à ravir*, and a telling incident in Roman courtship; Mr. HENRY MOORE has the line with a splendid reach of dark-blue sea off the south coast; Miss EVELYN PICKERING is true to her sculpturesque power of design in *Sleep and Death, the Children of Night*; Mr. PARSONS helps the landscapists with a beautiful upright subject of trees and water, when the *Daylight Dies*; Mr. WOODS sends one or two brilliant and admirable Venetian sketches; there is a bit by VAN HAANEN, too; a semi-classic group by WATERHOUSE; a portrait of M. FANTIN, by himself; and so on. Really, to mention all the good things were to write pages instead of lines. Of padding and of poor work there is also abundance, but if, as seems indicated both by the public reception of this exhibition, and the excellent average of the pictures sent in, there is room for yet another annual show of modern oil pictures in the winter time, then we may allow that the start has been wisely as well as of a certainty brilliantly made.

### BATH IN THE SEVENTEENTH CENTURY.\*

IN the famous third chapter of MACAULAY'S History the condition of Bath towards the close of the seventeenth century is described, and, as usual, the city is made to appear far worse than a modern English town. The finest houses are said to have greatly resembled “the lowest rag-shops and pot-houses of Ratcliffe Highway.” The bedrooms of persons of quality were hardly fit for footmen; the floors of dining-rooms “were coloured brown with a wash made of soot and small beer, in order to hide the dirt;” there were no hearths or chimney-pieces of marble; the best apartments were hung with coarse woollen stuff, were furnished with rush-bottomed chairs, and had fireirons which cost from three to four shillings. The historian relied for evidence mainly on Wood's “History of Bath,” and he says that he consulted “several old maps and pictures of Bath, particularly one curious map, which is surrounded by views of the principal buildings.” It would be difficult to find more worthless representations of buildings than those which are made by map makers, ancient or modern, but they were well adapted for a writer whose ambition was to demonstrate how great was the revolution which his party had accomplished in the social life of England.

A drawing, executed by a pen and pencil, that was purchased for the British Museum in 1881, is enough to show how little reliance is to be placed on MACAULAY'S “curious map,” and his other authorities. It is dated 1675 and represents the King's and Queen's Bath, which was then open to the sky, the houses on three sides of the bath, the bathers, and the spectators. In fact, it is a photograph of Bath life in the seventeenth century. This interesting drawing has given rise

\* *The Bathes of Bathes' Ayde in the Reign of Charles II.* By C. E. Davis, F.S.A. Bath: W. Lewis & Son.



to a learned and readable essay on the Mineral Baths of Bath, by Mr. CHARLES E. DAVIS, the city architect, a gentleman who has done more towards revealing the greatness of ancient Bath than a host of WOODS, STOKELEYS, and COLLINSONS.

The first thing that the old drawing reveals is the superior character of the houses which were about the baths. They are very different from those which Lord MACAULAY found in Ratcliffe Highway. Eight are represented, and no two are alike in style. The majority appear to have ashlar fronts; two are rough cast. It is remarkable that, although the houses no longer remain, there are documents which have enabled Mr. DAVIS to identify them. Nearly all were lodging-houses or inns; for in those days the city was bounded by the Mediæval walls and gates, and it was difficult to find room for all the visitors, unless private houses were utilised. On the west side was a large house of five storeys, which has an inscription running along the top—"Annæ Reginae Sacrum, 1618"—in honour of the Consort of JAMES I. Next to it is another large house, with a curious balustrade, which may have been a copy of one in Bradford-on-Avon, designed by JOHN HALL. This house was built in 1653 by JOHN CHAPMAN (a member of a family that has been long connected with Bath), and he encroached upon the street and path. According to the Council Book, it was awarded and agreed by general consent on November 4, 1653, that the mayor's sergeants should go and forbid the workmen from making any further building until leave and license were given settling how far they were to go. On December 2 the subject was again brought before the Council, and it was arranged that a yearly rent should be paid for the 16 inches of encroachment. One member wished the rent to be 10s., another 50s., a third 60s., two said 40s.; but, as there were thirty-four who considered 20s. to be sufficient, that sum was agreed on. It was a wiser way of settling a dispute than ordering the house to be taken down, or entering on an expensive lawsuit. The name CHAPMAN is often found in the records. It occurs in the account for the funeral expenses of Bishop MONTAGU of Winchester, who died in 1618, and was buried in Bath Abbey. According to a contract in the possession of Lady NORTH, his tomb cost 200*l.* Through the liberality of an unknown benefactor, it was restored under the honorary superintendence of Mr. DAVIS. As it was constructed of alabaster and black marble, the old paint was removed, and only the decorations and coats of arms were regilt and painted. On the north side of the bath, among other buildings, was "the Cann office." It is no longer possible to explain the meaning of the word. A cantred office was the office of a hundred, and the Cann office may have been the place of meeting for the magistrates. Another supposition is, that as canna meant a measure for cloth goods, the house may have been the place where the standards were deposited. But may not the Cann office have been in some way connected with the drinking of the waters, or of some more palatable liquid before the "Dry Pump" was erected in 1662? Cann, according to old dictionaries, was a drinking vessel made of wood in the shape of a barrel, and at the time the sketch was made the Cann office was a wine-shop. Although the waters had been recommended in 1572, and were in repute during the seventeenth century, the first Pump Room was not commenced until 1705. Mr. DAVIS believes that an adjoining house was a coffee-house. There is no improbability in this, for in 1675 coffee was a fashionable drink, and a satire which appeared in 1672 states that, "he's no gentleman who drinks it not."

The baths are as remarkable as the surrounding buildings. In 1628 a Dr. VANNER wrote: "The King's Bath is the hottest, and it is for beautie, largenesse, and efficacy of heate, a kingly bath, indeed, being so hot as can be well suffered. The Queen's Bath is a member of the King's Bath, a wall onely going betweene them with a passage therein to goe from one to the other." The sketch corresponds with the description. The King's Bath is enclosed, and the Queen's Bath partly, by an open balustrade, which had been presented by Sir FRANCIS STONOR in 1624 as a recognition of the benefits he received from the bath. In the centre of the King's Bath was an octagonal building about 40 feet high, which enclosed the principal spring, and was called "The Cross." It was erected in 1664, at a cost of 150*l.* 4*s.* 8*d.*, and was removed in 1781. The four arms or transepts of this cross or "kitchen" had elliptical openings, with pilasters and pediments. They supported an octagon, which had an ogee domical roof covered with small tiles, which tapered off and was surmounted by a crowned lion guarding a shield. Altogether it was an effective

example of the English Renaissance of that time. The bath contained several niches, and attached to the walls were brass rings for the use of bathers, which had been presented in thankfulness for cures. One massive ring was from the notorious BARBARA PALMER, Duchess of CLEVELAND, who may have regained through the Bath waters some of that "superb and voluptuous loveliness which overcame the hearts of all men." A more worthy donor was JOHN REVET, the royalist brazier, who purchased and preserved during the Commonwealth the statue of CHARLES I., which is now at Charing Cross. He "received cure of a true palsie from head to foot on one side," a circumstance which is worth recording in an age when so many are paralysed by overwork.

A crowd of people are seen leaning over the balustrade and sitting in the windows, while the bathers disport themselves below. The sketch therefore suggests the fashions of 1675. There are twelve figures in the foreground, which are sufficiently large to indicate the costume of men and women. In 1672 a satire appeared, entitled, "New instructions un'o youth for their behaviour, and also a discourse upon some innovations of habits and dressing; against powdering of hair, naked breasts, black spots, and other unseemly customs." But there is nothing unseemly in the costumes which were in vogue in Bath three years later.

### PARIS NOTES.

CONNOISSEURS would appear to have no very high opinion of the value of the collection left by M. Thiers to the nation, which is to be placed in a separate room at the Louvre. The *Courrier de l'Art* doubts the authenticity of the pictures by Murillo, Ruysdael, Gerard Dow, Wouvermans, Neefs, Lebrun, &c. The greater part of the other paintings are, moreover, admitted to be only copies. M. Thiers was, in fact, accustomed to say that if he wished to purchase originals, all his fortune would not suffice, and that therefore he contented himself with copies. There are, however, some Florentine bronzes that will repay an inspection.

At the beginning of the present year the authorities of the Louvre Museum purchased for 200,000 frs. an oil painting—*Apollo and Marsyas*—attributed to Raphael. This picture is now on view in the Salon Carré. There are once more some doubts of its authenticity. French critics have not yet noticed it, but the journals are calling for an explanation or statement upon the subject from the Louvre authorities.

On Saturday was opened the Exhibition of the works of André Gill, the caricaturist, at the rooms in the Galerie Vivienne. About eighty pictures and three hundred comic illustrations to journals have been got together by M. Cohl, among them being the artist's first design published in 1862 in the *Revue pour Tous*, illustrating a parody of Victor Hugo's "Misérables," and a signboard painted by Gill for a restaurant proprietor at Montmartre, and representing a live rabbit tossed in a frying-pan, a punning allusion to the *lapin sauté*, which is so favourite a dish at suburban eating-houses. The proceeds of the Exhibition will be devoted to keeping the artist during the period of convalescence.

The Académie des Beaux-Arts met last Saturday to elect three corresponding members in the sections of sculpture, architecture, and engraving. The results of the election were as follows: Sculpture—M. Civillate, of Palermo, succeeds M. Jerichau, of Copenhagen, deceased. Architecture—M. Huypert, of Amsterdam, succeeds M. da Silva, who has passed of foreign associated members. Engraving—M. Tautenhoy, of Vienna, succeeds M. Mercuri, of Rome, who has likewise become an associated member.

The approaching marriage is announced of M. Idrac, the sculptor, with Mdle. Cécile Ballu, daughter of M. Théodore Ballu, architect of the Hôtel de Ville.

M. de Fallières, the new Minister of Public Instruction and Fine Arts, last week summoned a meeting of the Superior Council of Fine Arts to consider the three following questions: (1) whether the National Exhibitions, the first of which, held during the past autumn, met with but a moderate degree of favour from the public, shall be continued; (2) whether, if continued, these exhibitions shall be held every six, five, four, or three years; and (3) as to the best season of the year for holding the exhibition. After a long debate, it was decided almost unanimously that these State Salons shall be continued every three years, and that the



next shall be opened on May 1, 1886. In that year, therefore, the Annual Artists' Salon and the Triennial Exhibition of the Government will be held at the same time. Immediately the above decision was made, public, a representative committee of the Société des Artistes Français, consisting of MM. Bailly, president of the Association; Bouguereau and Guillaume, vice-presidents; Charles Garnier, Thomas, and Yon, secretaries, waited upon the Minister to protest against it, on the ground that the State Exhibition, being held in the Palais de l'Industrie, would deprive the artists of the locale that has hitherto been placed at their disposal every spring, and would thus prevent the Salon from being opened at all in 1886. In reply, M. de Fallières declared that the Government had not the slightest intention or wish to create any rivalry between its own exhibition and that of the Association, nor throw any obstacle in the way of the latter. He said, however, "it was his desire that the two exhibitions should be held at the same time, and he should do all in his power to carry out this plan;" but promised, on the other hand, that "he would submit the question to further consideration, with the view of finding a solution compatible with the rights of the State and the interests of the Association." Notwithstanding the cordiality and politeness that prevailed on both sides throughout the interview, it is evident that a considerable feeling of antagonism between artists and the Government is being aroused by this Triennial Salon.

M. Camescasse, the Prefect of Police, has just issued a fresh and very stringent set of regulations applicable to the *garnis*, or low lodging-houses, of Paris. (1) In future it is prohibited to let out any room below 2 mètres 50 cent. (about 8 feet 3 inches) in height, or presenting less than 14 cubic mètres of space per occupant. (2) The floor must be impermeable to water, and be frequently washed down, unless it be planked and waxed. (3) The walls of rooms containing more than two beds must be painted or whitewashed; those holding one or two beds only may be papered, but the paper is to be removed as often as the visiting inspector judges fit. (4) Every room must be ventilated to the satisfaction of the inspector, and those of more than four beds must contain a fireplace with open chimney or some other means of constant aeration. (5) It is absolutely forbidden to let or utilise cellars for lodging purposes, and basements can only be so used by virtue of a special police authorisation in addition to the ordinary license. This last is, perhaps, the most important and beneficial clause of the new regulations. At the present moment there are many *garnis* in which whole families are crowded into one small cellar far underground—for it must be remembered that Paris cellars are much deeper in the earth than is usually the case in England—most of the large houses let out in tenements having first a basement and then a cellar underneath, utterly excluded from light and the upper air. A special class of lodging-house inspectors has at the same time been created to watch over the observance of these regulations, any infringement of which will entail immediate forfeiture of the keeper's license, in addition to police court proceedings.

#### JUDGES v. ARTISTS ON ART.

JUDGMENT was delivered on Saturday last in the case of *Belt v. Lawes* in the Queen's Bench Division. Application had been made on the part of the defendant for a new trial, on the grounds of misdirection and the excessive damages (5,000*l.*). Mr. Justice Manisty and Mr. Justice Denman were of opinion that there was no misdirection, but agreed that the amount of damages should be reduced to 500*l.*, with costs, otherwise an order will be made for a new trial. Lord Coleridge, on the other hand, was of opinion that Baron Huddleston's charge to the jury was wrong in principle, that the damages were extravagant and excessive, and that there was a serious miscarriage at the trial. On the relative value of an artist's and a lawyer's opinion on an art subject the following remarks of the Lord Chief Justice are worth consideration:

An importance in some respects altogether exaggerated has been imported into the case. Under ordinary circumstances, whether a public writer was or was not justified in saying of a man that he was not a sculptor, but an ingenious and successful sculpture-broker, who presents to the public as his own work which has been invariably designed and executed by other hands than his (for this is the real gist and substance of the alleged libel)—this was a question hardly, in itself, worth the expenditure of very large sums of money and forty-three days of the public time. But some of the very greatest names in the country have been

involved, either personally or by reference, in the discussion. The Royal Academy has itself, so to say, been put upon its trial; and the case has assumed proportions and an importance quite incommensurate with the issues which it alone necessarily raised. The artistic character of the President will, I hope, survive the scathing criticism to which it has been subjected by my brother Manisty, but in that and other respects I intentionally abstain from making any reply to observations which, to my mind, were uncalled for, and which I therefore abstain from commenting on in any way. I will try not to add to the mass of the proceedings, and in giving my reasons for thinking the present verdict unsatisfactory I mean to be short and general. In one instance only shall I particularise the evidence which appears to me to be unsatisfactory, and in that case because it is a document which cannot be altered, though it may be argued about upon a second trial. Generally speaking, I desire to avoid detailed criticism upon evidence with which I am dissatisfied, for it almost always happens that the criticism is met by change. The evidence at the second trial is what a judge may say it might have been, or ought to have been, upon the first. I have already stated what I conceive to have been the true question in the case; it is perhaps better that I should also state what I conceive it was not. It was not whether Mr. Belt could make a passable model—one which to an uneducated or uncultivated eye would pass muster as a piece of sculpture. Most men of the least dexterity of hand could do as much as this. The question was not this, but whether fine works of art, admitted on all hands to be so, were really his work or the works of other men; and as to this, again, not whether, in the long course of work upon them, he may not now and then have actually handled the clay, or even carved the marble, but whether the completed work, the art in them, when they had art—what I believe logicians call the "formal cause" of them—that which made them what they are—was Mr. Belt's work or another's. Now this distinction is, in this case, of the last importance, because in sculpture, in the long and various process from the slight sketch or drawing to the completed marble, there is so much which is necessarily mechanical, and which a competent carving mason can do just as well as a Phidias or Michael Angelo. Help, therefore, up to a certain point, every sculptor, from the highest to the lowest, has, or may have, with absolute integrity—indeed, with universal knowledge and acceptance. But there comes a point in the modelling, and I should have supposed, but for what I have heard of Flaxman, there comes a point in the carving, too, where mechanism ends and original art begins. I imagine that this point is almost impossible to state in words with any approach to accuracy. I certainly will make no attempt of the kind, for I have no pretensions to, and disclaim altogether, any artistic knowledge. I have it not, and if I had it I think I should have no business to apply it. The law has said that a jury who may know nothing, and a judge who may know nothing too, are to determine, if necessary, as facts abstruse points of science or subtle and delicate questions of art. It is all the more important, therefore, that what is fact in such a matter as this should be clearly understood, and that what are the true principles of judgment should be correctly laid down. There comes then, somewhere and at some time in the process of sculpture, the point at which help ceases to be honest; when the real artist gives character to his work; when mere labour ends and execution begins. I deprecate the use of fine language to conceal cloudiness of thought; and if I seem to use it, it is only because I despair, as I have said, of describing with any accuracy a fact which is a fact, but which is to be felt rather than expressed. Yet this fact—whether Mr. Belt had help which was not honest—is cardinal to the cause. If he had not—if he had no more help than every sculptor has or may have—then he is a real sculptor, and is (subject to a subordinate question as to the amount of damages) entitled to keep his verdict. If the evidence shows that he had such help, that the completed works which he put forward as his own were not his own in character nor in art, then he is a mere sculptor-broker, the verdict is wrong, and the case should be tried again. I have said "if the evidence shows," because I conceive the issue to be one of fact, but fact of a peculiar kind, and that the evidence to establish it must likewise be evidence of a peculiar kind. Now the character or genuineness of works of art is not, in my judgment, a matter of opinion. Anything, no doubt, may be said to be matter of opinion as to which men will not take the trouble to inform themselves. But a knowledge of art is like a knowledge of science; it is matter of education and experience; and it seems to me that you might almost as well disbelieve a body of astronomers, who tell you that the earth moves and the sun stands still, on the ground that very eminent members of society tell you, as a fact, that they have seen the earth stand still and the sun rise up in the east and go down in the west, as disbelieve a body of great artists who tell you that the same man did not make two works of art, because persons very high in the social scale, but with no knowledge or training in art, tell you as a fact that they saw the same man at work upon them. It is what I think (with deference) the fallacy of opposing "fact" to "opinion" in this matter that constitutes, to my mind, the error of the summing-up of my learned brother, and which has led the jury to a conclusion against the weight of the evidence. I



do not doubt that one fact is worth twenty opinions, "fact" and "opinion" being each used in its proper sense. But the words are not used in their proper sense if "fact" is confined to the physical fact of working manually on a bust, and the scientific conclusion of a body of men as to an artistic fact is called "opinion." It is not "opinion" at all; it is evidence of fact. No one who has ever been honoured with the intimacy or enjoyed the society of artists but must be aware how many things we overlook in works of art which are before our eyes, which are there, indeed, to be seen, but which it needs training or instruction to see. A copy and the original stand side by side, and a man of ordinary education can see no difference between them. A great artist comes, decides at once which is which, and decides it on grounds which are conclusive to the man of ordinary education, but which, nevertheless he would never have discovered for himself. I do not call this his opinion: I call this fact. Northcote the painter relates in his "Conversations" that Lord Kenyon, in a trial before him as to the genuineness of an engraving, listened with infinite respect to the evidence of the Academicians of that day, and told the jury that there was a great deal in this that he had no idea of, and that he supposed they were satisfied with the evidence of the artists. Lord Kenyon probably knew little of engravings, but he knew there was a great deal to know, and he listened to and followed those who could teach him. It seems to me that the question in this case was a question of fact; that there was a practical agreement upon it on the part of the witnesses best qualified to speak; that they were witnesses to fact, call it a fact of science or a fact of art; and that their evidence ought to have been, not in theory, but practically decisive. Now this was not the view taken by my learned brother. He opposed fact to opinion in a sense which, with all respect, I think, erroneous, and having once done so, the remarkable power and ability which his summing-up displays, and which any old antagonist of his at the Bar will well remember, were all the more certain to mislead the jury. Whether this is technically misdirection I really will not stop to inquire, but that he most powerfully impressed the jury with what I think a view of the evidence wrong in principle, and wrong in a point cardinal to the cause, I have no doubt. Of course, if it could be fairly suggested that a body of men such as the Academicians called in this case were corrupt or dishonest, that they gave their evidence not *bonâ fide*, but from an unhandsome wish to oppress a brother artist, such considerations as these were very proper to be put forward, and would be rightly taken into account. But in this case for such suggestions there is absolutely no ground. If Mr. Belt seriously for a moment entertained the idea that the eminent men who, unwillingly and under a *subpœna*, and without preliminary examination, gave evidence in this case, gave it from a fear of his rivalry or from a jealousy of his talents, his vanity amazingly misled him. The suggestion, to my mind, is utterly absurd. While fully, therefore, admitting the weight of such considerations—if they existed—I must add that there appears to me no reasonable ground for even suspecting their existence. I do not go at length into other questions.

It is understood that the compromise suggested by the two judges has been adopted.

#### MR. VAL PRINSEP ON ART STUDIES.

THE annual meeting of the Worcester School of Art was held last week, under the presidency of Mr. Val Prinsep, A.R.A., who distributed the prizes to the students. An address was delivered by the chairman, in which he said that he did not intend to lay down any rules for the art of painting or designing. Such rules no doubt did exist, but they had been broken time after time by the great masters so that he was bound to say the exceptions exceeded the rules in number. To give them practical advice he must either see them at work, or else he must himself work before them, palette on thumb. But he could perhaps lead them to think about the art which they had been studying, and if he succeeded in that he should be doing something to their advantage. First of all let him impress upon the students, and not only them but the ladies and gentlemen who had honoured him by coming there that night, the great importance of art. He did not mean his art alone, but all the arts. What was it that made life enjoyable to us, what was it that gave us pleasure beyond the beasts of the field? The cultivation and the enjoyment of the arts, literature, painting, music, and sculpture. Science occupied the reason. It did not appeal to the imagination as art did. Between our conscience and our Creator, nothing could improve the human mind so well as art, and art was nothing if it was not human. The great masters of the past had given us our ideal. When art declined, men became more barbarous, as was exemplified in the cruelty of the middle ages. Then came what was known as the Renaissance, and little by little art was built up to what it was now. Art was not antagonistic to religion. Far from it. He maintained that the best and holiest men were the most humane, and therefore the most accessible to art influence. Art was a great humaniser. But it must be studied before it could exercise its proper influence on mankind. He then proceeded to show how necessary it was

that art should be studied so as to thoroughly understand it. The reason that modern artists could not rival the great masters of the past was that they were too much hampered by convention and fashion, and the middle man, who went out and cried, "These be thy gods, O Israel!" The trashy novel was more successful than the fine poem, and the reason was that it required less study. He urged the students to study art thoroughly, so as to understand it, and warned them to beware of imitation. What all artists should aim at was individuality and naturalness. What he saw around him were things that were being done all over the country. The artists at South Kensington judged of the design, and did not think of the patience which had been taken over it. They should not be content with what they had there. He could assure them that it was only the first prize was worth winning, not for its intrinsic value, but because there were few first prizes. They must not be content with books and certificates; there were cartloads of them sent about the country. The gold and silver medals were within their reach, if they would work for them. They might ask him how to do it. He knew the difficulty, for he had passed through it, and he felt that he had yet much to learn. They must think what they had to do, and do it as simply as they could. They must strive after individuality, and avoid imitation, because he assured them that they would never imitate the merits of artists, but only the faults and peculiarities. He knew there were many amongst them who did not aim at making themselves artists. The profession would soon be overstocked if every one who learned to read and write became an author; but that was no reason why men should not learn to read and write. But there would be much employment for them as designers. The great fashion at present was the Japanese style, and he explained to them how the Japanese artist worked. If he had a bird to paint he followed it for weeks, until he had thoroughly mastered every line, and then he had no difficulty in drawing it. That was how their perfectness of line was arrived at. He advised them to go into the pleasant places about Worcester and study nature in every variety. Nature was but another name for the Deity.

#### ANCIENT ART THEORIES.

A LECTURE was delivered at the Edinburgh Philosophical Institution by Professor Butcher on "Some Ancient Theories of Art in its Relation to Life." Socrates, he said, was the first Greek who foreshadowed future theories of idealism in art. They must, however, look to Plato for the first outlines of a theory of art. So far as they knew, he was the first to combine in one idea the arts which were now called the "fine arts," but which he called the imitative arts—including sculpture, painting, music, and poetry. Art, however, had no interest for him as a separate branch of human activity, but only in relation to ethics and politics, and, above all, as an instrument of education. The fine arts to him had all one common character—they were imitative. Poetry, imitated by words and metre, music by sounds, sculpture and painting by form and colour. From his ideal state, Plato banished all kinds of imitative art. Going on to enumerate the reasons for this, it was shown by the lecturer that poetry was attacked by the philosophers on account of its being bound up with the current polytheism, as was also sculpture; and that of the different kinds of poetry the dramatic form was held to be specially dangerous. It taught men, it was said, to be actors and not citizens, to lose their own personality, and to be false to themselves. He (Professor Butcher) had been told that Carlyle, reading Plato rather late in life, exclaimed, "Why, that is what I have been saying all these years past!" Indeed, the duty on which Carlyle dilated of being what he called true men—to avoid all shams, shadows, semblances, hearsays, falsehoods, and all sorts of them was only another and more wordy version of what Plato expressed. The main charge against artists was that they imitated appearances—the outward form of things, and not their essence. He thought that underlying the objection to imitative art was the duty of being "true to ourselves." Plato also viewed the artist, especially the poet, as an inspired and privileged madman. When Socrates went to the poets and asked them the meaning of their own works he found they could give no rational account of what they had written. "They showed me," he said, "that not by wisdom do men write poetry, but by a sort of genius and inspiration; they are like diviners who say many fine things, but do not understand the meaning of them." The poet, then, stood so far on a lower level than the skilled workman, whose art was useful and intelligent, and based on rational principles; still further was he below the philosopher who spoke what he knew, and who had passed beyond the outward show to the hidden unity of existence. Now, if fine art was, indeed, only an art of fair show and misleading images, if the artist lacked insight into the truth of things, if he lacked that purpose, which even the craftsman had who worked for use, what, then, could be the end and aim of it? It was simply what was called in the "Sophist," "a more graceful and artistic form of pastime." It sought to please, and to please the masses. Some of them would probably accept that description of art as one of its highest titles to honour. But pleasure to Plato was a word of base



associations, and a democratic pleasure must needs be ignoble. Hence the fine arts were reckoned with rhetoric and sophism and other arts which looked not to what was best or truly wholesome, but to the pleasures of the moment. So, too, in the "Republic" imitative artists were classed with ladies' maids, barbers, wet and dry nurses, confectioners, and cooks. But not only was art useless, it was worse. Against dramatic poetry in particular this new charge was directed. Poetry stirred and stimulated the emotions, which ought either to be suppressed or controlled by reason. It was enfeebling to witness or sympathise with an exhibition of feeling on the stage which a man would count unworthy or degrading in real life. Socrates appealed to, says that, strictly speaking, the actor "is not in his right mind." Of the comic stage, it was said "that you laugh at buffoonery which you would be ashamed to utter, and the love of coarse merriment on the stage will at last turn you into a buffoon at home." And, in general, it might be said that "poetry fed and watered the passions instead of starving and withering them, and made anarchy in the soul by exalting the lower element over the higher and dethroning reason in favour of feeling." Such was the indictment against art. Let them see how Plato put the other side of the case. In the "Phædrus" art depended on inspiration; it was a revelation to sense of eternal ideas. Earthly beauty to Plato was the first step in the ascent by which the soul rose from the contemplation of fair forms to fair deeds, and from fair deeds to fair ideas, till it arrived at last at the contemplation of beauty absolute. The faculty of reminiscence which made this beatific vision possible was for Plato the common principle of philosophy and poetry; so that these, often disunited, met in a world which transcended experience, and whose truths were the master truths of all their being. They had thus two views of fine art in Plato apparently irreconcilable. The unmeasured attack in the "Republic" upon imitative art, and especially on the drama, was the more startling and paradoxical when they remembered Plato's loving perception of all that was beautiful, his gifted artistic nature, his poetic imagination, nay, even the dramatic form in which his own works were composed. But there were certain considerations which helped them, if not to harmonise the opposing conceptions, at least to see how the author of the "Republic" could in a different mood, and from another point of view, also write the "Phædrus." Plato, when he reviled art as merely imitative was thinking of art as it was; when he glorified it as the inspired expression of eternal beauty he was thinking of art as it should be—art leading to and at last merged in philosophy. Art could be admitted when he came to frame, not an ideal "Republic," but a real city in the "Laws." The rigour of his sentence against artists was abated. Imitative art had been condemned as a form of amusement and of pleasure. In the "Laws" he allowed that there was a pastime which was also education, a pleasure which was also discipline. Art was still treated as purely subsidiary to education, but it was possible to educate by a right use of pleasure. Art, then, must harmonise and discipline, rather than stimulate the emotions. Music was declared to be a chief agent in moulding and regulating character, and in schooling the emotions of human beings who were by nature irrational, restless, roaring sort of creatures. The worthiest poems to set to music were those which incited to noble effort. Comedy was to be studied only to avoid doing what was ludicrous in life. A noble life was the noblest drama, and the artist who could teach them to live such a life was the best poet. It was sometimes said that the Greeks looked on morality from the side of aesthetics, and that they worshipped beauty at the expense of virtue. Such was not certainly the law laid down by Plato. To his mind art and morality found their point of union in this—that both converged upon philosophy, and that in the ideal world they both were merged in the contemplation of true being.

#### DALLINGTON CHURCH.

A DESCRIPTION of the recent restoration of Dallington church was read at the annual meeting of the Northampton Architectural Society. The author, the Rev. J. C. Beasley, said an honest endeavour had been made to carry out the work at once in a liberal and conservative spirit. Certainly nothing could have exceeded the liberality of His Excellency Earl Spencer, to whose generous gift the parish of Dallington was indebted for this great improvement, and who, having entrusted the work to Mr. Edmund Law, unhesitatingly sanctioned the plans which he prepared. But not less truly might it be said that the work had been carried out with an earnest desire to conserve the main features of the building, and even the smallest details which seemed worth preserving. The only considerable alteration consisted in the lengthening of the chancel about five feet, but there could be no doubt the existing eastern wall was not only a very modern one, but that its position was not original. This was very evident from the fact that a small doorway on the north side, leading from the comparatively modern chapel, and originally, no doubt, inserted in the external wall, opened within the sanctuary, and not more than three feet from the east end. It seemed, however, worth while to test this matter further, and the foundations were examined.

Pretty plain proof was at once forthcoming that the church had extended eastward, but how far there was no means of ascertaining, as no angle was found on either side, and no traces of the east end. This was, however, easily to be accounted for by the fact that the ground had been disturbed for burials, and the search was for the same reason discontinued. When, however, the extension spoken of was carried out, fresh traces of the north and south walls were found at a lower level, so that it might be confidently asserted that the present chancel was shorter than it was in olden times. The extension might be regarded as a very great improvement. The chancel, as it existed prior to the restoration, was inconveniently small, and as there was every reason to believe that it had never been any wider, there was the more ground for gaining space in an eastward direction. Another addition would also probably be approved, even by rigid architectural conservatives, in the form of buttresses at the north and south angles of the chancel. These were designed after the patterns of very beautiful and simple specimens of the Early English type, which were found on the north side of the nave. Coming to the interior, the first point which demanded attention was the level of the church floor. It had been originally intended to have a step of about six inches at the chancel arch, but further consideration seemed to make this undesirable. In the first place, there was not the slightest doubt that the existing level was the old one, and the first result of raising it would have been to obscure the bases of the columns of the chancel arch. This, no doubt, might have been overcome by placing the step on the eastern side of the arch; but if this had been done the doorway on the north side, which is of really beautiful proportions, would have been utterly spoiled. Its dimensions were so small, that to have taken six inches from the height of the jambs would have been enough to make it look utterly unlike an entrance. One still stronger objection was that, if this course had been adopted, either the height from the floor to the wall-plate must have been diminished, or the pitch of the roof lowered, or the apex of the roof carried higher than that of the nave. Perhaps, in the view of many persons, the last alternative would be considered the least objectionable; but to his own mind nothing was more calculated to spoil a church than carrying a high-pitched chancel roof above the nave. On the whole, he believed they had adopted the best course when they decided to retain the existing level, and all the more so when, in clearing away some earth on the south side, they found fresh indications that this was the original one in the discovery of a portion of the old splints and the remains of a buttress. A step of bricks was placed at the entrance to the sanctuary, and the holy table stood upon a second of the same dimensions. The east window was of a very beautiful design, in the early Geometrical style, thus harmonising with the principal features of the work. It replaced one of very poor proportions and plain appearance, which had been inserted about fifty years ago. There was one window out of the three on the south side which was considered worth preserving. It was of the Perpendicular period, and had been carefully restored (though it had no pretension to beauty) and rebuilt. The other two windows, which were very poor imitations of it and worked in the roughest manner, had been replaced by windows of a somewhat similar design to that at the east end. The architect had planned to make these of still richer appearance by decorations on the inner side, but in taking down the plaster walls it was found that at some former period the jambs of two out of the three windows had been continued down to within about 2 feet of the floor level, thus forming a kind of stone bench. The centre window, however, had apparently not been treated in this way. This somewhat peculiar feature was considered well worth preserving, even at the cost of sacrificing some of the proposed decorations; and no one, he thought, now that the restoration had been completed, could doubt that the decision was a right one. The extreme narrowness of the chancel was its principal defect, and these wide and deep recesses went a long way towards remedying it. The effect from the west end was particularly good, the light and shade being broken up in a very pleasing manner. The arrangement has the further advantage of affording a seat within the rails, thus doing away with the necessity of placing a chair on that side, and trespassing upon the already cramped space. Immediately below the westernmost of the three chancel windows was a low side window—one of those curious insertions sometimes spoken of as leper windows, but there was, he believed, no authority for calling them by this name. Their use was extremely uncertain, but it had been suggested that they might have been used as confessional windows, and the speaker added that this curious though simple relic of a bygone age would be jealously preserved. No discoveries of any interest were found on the north side, with the exception of a perfectly plain square recess (which, no doubt, had been used as an aumbrey). On the eastern face of the wall over the chancel arch were found very plain marks of the old Early English roof, the pitch of which was very high, but corresponding as nearly as possible with the marks of a similar one on the wall of the tower, which was found at the time of the restoration of the nave. The ornamentation of the restored chancel had been carried out in a way which he hoped might be regarded as thoroughly suitable to a village church. The choir stalls—one row only on each side—were of oak; the tiling of the floor (by Maw & Co.) was of simple



but good design; and the floor of the sanctuary was laid in Mosaic tiles of a very beautiful description. The reredos was of Eden stone, and was designed to have the blank compartments ultimately filled in with stone figures of the apostles in alto relievo. The roof was of oak and harmonised in design with the general plan of the restored chancel. Lastly, Mr. Beasley added, he must mention that Lord Spencer's liberality in defraying the cost of the restoration had been met by the no less generous gift of a beautiful organ—built by Stringer, of Hanley—and for the design of which he was indebted to their architect, Mr. Edmund Law, who had spared no pains to bring the work as near perfection as possible, and to whom the parish would always remain under a heavy debt of gratitude.

### FREE SPACES IN LARGE TOWNS.

A DISCUSSION on Mr. Honeyman's paper which was published in *The Architect*, was opened on Monday evening by the Glasgow Architectural Society.

Mr. J. Sellars, the president, said that Mr. Honeyman very truly remarked, that in dealing with the question of "dwellings for the working classes the element of cost can never be ignored," and therefore the price paid for the ground on which the houses are built has to be taken into account, just as much as the cost of the stone and lime, in fixing the rent which must be charged for each house in order to get a fair return for the outlay. It was therefore of the utmost consequence that the builder should be allowed all reasonable liberties in arranging his houses on the ground. No one, however, would say that some such regulations as those laid down by the municipal authorities were not absolutely necessary. But Mr. Honeyman argued that the regulations in the new Police Act tended in the direction of rendering it impossible for buildings to be erected on any site which had to be bought and paid for, and profitably let at such rents as the lower class of workmen could afford. Mr. Honeyman had therefore prepared a plan, under which, by allowing greater liberty, especially as regarded the height of ceilings, a larger number of healthier and cheaper houses could be erected on specified areas of ground. Taking the area chosen by Mr. Honeyman for the purpose of illustration, Mr. Sellars went on to show that the greatest reduction of rent that could be expected, according to Mr. Honeyman's plan, would be 30s. a year. That, he admitted, would be an important difference in rent for working men, especially if, in addition, it could be demonstrated that the cheaper house was also healthier and more convenient. It was at this point, however, that a difference of opinion might arise. Speaking for himself, he did not think that a 10-foot ceiling was too high for a dwelling-house, but, while that was his personal opinion, he could not go the length of saying that if his neighbour thought that 9 feet, or even 8 feet, was sufficiently high, and he could prove that it was easier ventilated and better in many ways, and that he could find tenants for houses of that kind, he would prevent him erecting them. The cubic capacity being equal, he admitted the advantage of additional floor space gained by adopting low ceilings, although there was this to be said, that more floor space would just mean with many people more room for beds, and, therefore, more chance of overcrowding. The reply to this objection would no doubt be that that had nothing to do with the present question, and it was the duty of the sanitary inspectors to prevent overcrowding. But temptation should not be put in the way. It was difficult to say what should be the height of ceiling in such houses. The municipal authorities had drawn the line at 10 feet. They were asked to say no—draw it at 8 feet. But why stop there? There were no giants in those days, or if there were, they were not common in our domestic circles. Therefore, why not make the ceilings 7 feet, or even 6 feet 6 inches? He supposed the truth lay somewhere between the two extremes, and if he had to draw a line he would say 9 feet as a minimum, while he would recommend every person who asked his advice not to construct a house with a lower ceiling than 10 feet. He did not think that any person who built a house five or six storeys high, with ceilings of 8 feet only, would be likely to repeat the experiment, as he very much feared they would not let. He was quite aware that elsewhere such buildings were common enough, but custom was something, and we were not accustomed to more than four storeys. If hoists could be profitably and conveniently applied to tenements of dwelling-houses it might be different, but in the meantime three stairs were quite enough for children to climb. But, the other side would say, what was to be done if the 30s. difference in rent just turned the scale, and prevented the working man getting away from the insanitary den which he must occupy at present? Well, that question would not be easily answered if it was quite clear that there really was this difference; but he thought it could be shown that houses could be built as cheaply on this plot of ground under the Police Bill regulations as with less stringent regulations. He would deal with Mr. Honeyman's whole plot of ground, including the streets. It measured 300 feet by 200 feet. He would leave the end street 50 feet wide, but he would increase the width of the other streets from 50 feet to 60 feet. On this street he could erect buildings with four storeys instead of three storeys.

His buildings were 40 feet wide and 41 feet high. In this height he would have three storeys 10 feet high, and one at the top 9 feet 6 inches. Then as to the free space behind, he required to have three-fourths of the height of each building exclusively belonging to it—that was, 61 feet 6 inches—so that the distance of 200 feet from centre to centre of the street was thus occupied. He would thus put 160 houses on this plot of ground instead of 120; that was, of course, still twenty dwellings short of Mr. Honeyman's arrangement. But in this way the ground rent and the cost per house would be more nearly assimilated, the difference in the latter being only 3s. 8d. instead of 15s., and the difference in cost very trifling. Indeed, he was not sure but the difference in cost might now be against the unrestricted plan. Besides, his houses had a separate back green or paved area for each tenement, on which coal cellars and ash pits could be placed at much less expense than by having them under the building, as, he presumed, they would necessarily be in the other plan. Another very obvious advantage, and one which in favourable circumstances might prove overwhelmingly in favour of the restricted plan as a mere business transaction, would be that there was a much longer frontage—two-thirds more—available for shops, and the shops would front a wider street. If the locality was one in which shops were required the rents derived from them would far more than counterbalance the extra cost of ground per occupancy and the extra cost of building, if any, and would enable them to be let at a rent even less than on the other plan. The more he considered the restrictions as to widths of streets, heights of buildings, &c., contained in the Police Bill, the more he felt bound to recognise their wisdom as a whole. That was, however, altogether apart from the question as to whether they should be in a police bill at all, instead of a separate building act. At the same time it was undeniable that Mr. Honeyman had made out an excellent case in support of his views, and probably the true solution of the difficulty would be to relax the rules very materially in the case of the smaller class of workmen's dwellings in particular localities, or deal with special cases when they arose.

Mr. Howatt said he was much pleased with Mr. Honeyman's remarks, and he was clearly of opinion that if tenements were built north and south they would be blessed with the air and the sun, and this was a matter of very considerable importance. He did not think, however, that a 10 feet ceiling was more than should be required under the Act.

Mr. David Thomson said Mr. Honeyman had failed to distinguish between two distinct cases. There was first the case of vacant ground. In such a case, he would be strongly against crowding houses upon that ground. The great difficulty, however, was to deal with such sites as had been cleared by the Improvement Commissioners. These had been purchased at such prices that it was found impossible to erect workmen's houses upon them at remunerative rates with the present restrictions. He thought it would be well that the Commissioners should have power to frame special regulations for the reconstruction of these buildings; and Mr. Honeyman had demonstrated that such houses could be erected on such allotments as would be reasonably remunerative.

Mr. Gildard said emphasis had been laid on the houses being north and south. But in London, Edinburgh, and Glasgow the main thoroughfares ran east and west, and these arrangements could not be very readily upset. With regard to the other point, if the rooms were to have certain cubic contents he did not think there would be much reduction in cost by lowering the ceiling. The houses must be longer and broader, and there would be a heavier ground rent. He had found, however, in the course of his experience, tradesmen earning 30s. and 2l. a week occupying rooms only 8 feet square in front of the bed, and it seemed to him that such people did not want large houses, for 30s. a year reduction on the rent would be to them a matter of little consequence.

Mr. Miller (the secretary) said he believed Mr. Honeyman's principal object was to show how houses might be built so that the rents might be reduced, and there were many people, single women and others, who, instead of making 30s. or 2l. a week could only make 6s. or 7s. He (Mr. Miller) believed that if they honestly considered what caused the high death-rate it would be found that it was due to bad food, bad nursing and uncleanness. What therefore they had to do was to put as many houses on the ground as could be supplied with fresh air, to let them as cheaply as possible, at 1l. a year if that could be done, and then to punish the occupants if they did not keep them clean. Uncleanness, the presence of decaying organic matter was the chief cause of disease, and cleanliness should therefore be enforced; overcrowding must be dealt with by the sanitary authorities.

Councillor Gray considered Mr. Honeyman's paper a good set-off against the craze of two or three members of the town council, and suggested that the Association should send a deputation to that body on the subject.

The discussion afterwards terminated.

Messrs. William Sapeote & Sons have obtained the contract for the new church for the Old Meeting Trustees, Birmingham. The work is to be commenced immediately. Mr. J. A. Cossins is the architect.



## NOTES AND COMMENTS.

MR. MARKS, R.A., has completed two out of four decorative panels on a large scale. They are to fill semicircular spaces on a landing, of which the upper part is white and the lower part is lined with light oak in panels. The scheme of colour has been arranged to suit the position of the paintings. Mr. MARKS is one of the few English artists who know the value of white. In this case it may be said to be the predominant colour, and under the circumstances it is the most suitable. With white plaster above and at the sides, and the lightest oak underneath, rich or dark colours would become too heavy and the decoration too obtrusive. Birds form the subjects of both paintings. In one we have the bank of a river, with mountains beyond. Here and there in the foreground flat rocks crop out, with patches of green between them. Several white pelicans are seen on the bank, some standing and others lying. The second picture is also a river scene, but in a country that appears less bleak and stern. Here are white storks and cranes, with flamingoes of a delicate pink. Tall plants rise behind, and form a background. The birds are represented with an accuracy that would delight a naturalist, and the vigorous, decisive execution shows that the painter's hand has not been affected by the delicate finish that is seen in his small figure pieces.

It is proposed to have an exhibition of architectural sketches in the gallery of the Burlington Fine Arts Club. They will be restricted to those which are by architects who are no longer living, and are to be genuine sketches of works abroad, not designs for projected buildings. As a matter of course the majority will be of Classic or Italian buildings, for it is only within the last thirty or forty years that Continental Gothic was accepted as a subject for study. It is to be hoped that the committee may be able to obtain some of the sketches in Greece and Egypt by Professor COCKERELL and Mr. CHARLES BARRY. Although modern designs are not admissible, would it not be well to make an exception in favour of the few which are known to be by architects of the sixteenth and seventeenth centuries?

ANOTHER attempt is about to be made towards solving the difficult problem of housing workpeople in London. On Thursday the governors of St. Bartholomew's Hospital agreed to lease a plot of ground to MESSRS. ALTMAN & SIMS for the purpose of erecting industrial dwellings on a novel plan which has been devised by Mr. G. R. SIMS, the author (a son of one of the lessees) and is a result of his investigation of the condition of the houses of the poor. The site is in St. Luke's, and at present is covered with twenty-four small houses in Seward Street, and six houses in Central Street. The lease is for eighty years, and the yearly rent 680*l.*, or about 4*d.* per square foot. The lessees undertake to expend 20,000*l.* in the erection of buildings—which in principle will differ from the PEABODY or the WATERLOW model dwellings.

THERE is one city where architects are busy, but it is a great way off, being Minneapolis in Minnesota. It appears that the local architects are overworked, and it has been found necessary to send elsewhere for some plans, as the building owners are in a hurry. An immense quantity of building material has been ordered for delivery early in the spring, and contractors are said to be "piling up orders in advance," a feat which is not easily understood. Many an architect and builder in this country must wish that business followed the same law as the storms, and that it could be predicted to appear here quickly from the West.

THE following alterations of Bylaws 26 and 27 will be proposed at the meeting of the Institute of Architects on January 7, 1884: "Any fellow or hon. fellow shall be eligible to be nominated by the council as president, but no member who has filled the office for two successive years shall be again eligible for the presidency until the expiration of two years from the termination of his office." "Any fellow who is or has been a member of council shall be eligible to be nominated by the council as vice-president, but no vice-president who has filled the office for six successive years shall be eligible for re-election as vice-president until the expiration of twelve months from the termination of his office."

THE statue of Mr. GLADSTONE by Mr. ONSLOW FORD in the City Liberal Club is a clever work, but it is in a bad position, and is badly lighted. In all buildings of the kind where statues and busts of celebrities are inevitable, provision should be made for their display. This has not been done in Walbrook. The pose of the figure has been studied from life in the House of Commons, where the sculptor took his position on several nights. Mr. GLADSTONE is represented standing—one hand holds a small scroll, and the other is partly closed, the forefinger being extended in the way that is common with some orators. The dress is an everyday costume, the frock coat and trousers fitting rather loosely, and falling into folds that would look better in bronze than in white marble. The likeness is excellent, and the statue is a pleasing contrast to the conventional figures that pass for English statesmen.

AN examination of the interior of Edinburgh Castle is to be made by an officer of the Royal Engineers. The alterations that may be recommended will, of course, be determined by military necessities. Professor BALDWIN BROWN says that, so much of national history is associated with the building, it would be well if the public were allowed a voice in the arrangements. He asks: "Cannot the public bodies of Edinburgh, antiquarian, historical, artistic, make their influence felt by passing resolutions urging the matter on the favourable consideration of Government? If the Town Council, ever zealous in good works, will take the lead, the Society of Antiquaries, the Royal Scottish Academy, the Cockburn Society, the Architectural Association, with other bodies, would provide a powerful weight of public opinion sufficient to start the movement. The result would be to provide for the use of the garrison a noble hall, and perhaps other fine apartments, now divided up and put to casual uses, and to afford to the people of Edinburgh an additional reason for being proud of their city."

M. ULYSSE BUTIN, whose death was announced in last week's *Architect*, was born at St. Quentin in 1838, and was thus only forty-five years of age. His most remarkable works are *Suspense* (3rd medal, 1875), *A Fisherwoman, Departure for the Fishing* (1877), *The Sailor's Interment* (1878), *The Fisherman's Wife* (1879), and *The Anchor*, in 1881, for which he received the ribbon of the Legion of Honour. He was latterly engaged on a great decorative painting for the St. Quentin Hôtel de Ville—*The Comte de Vermandois Granting a Charter to the Town of St. Quentin*.

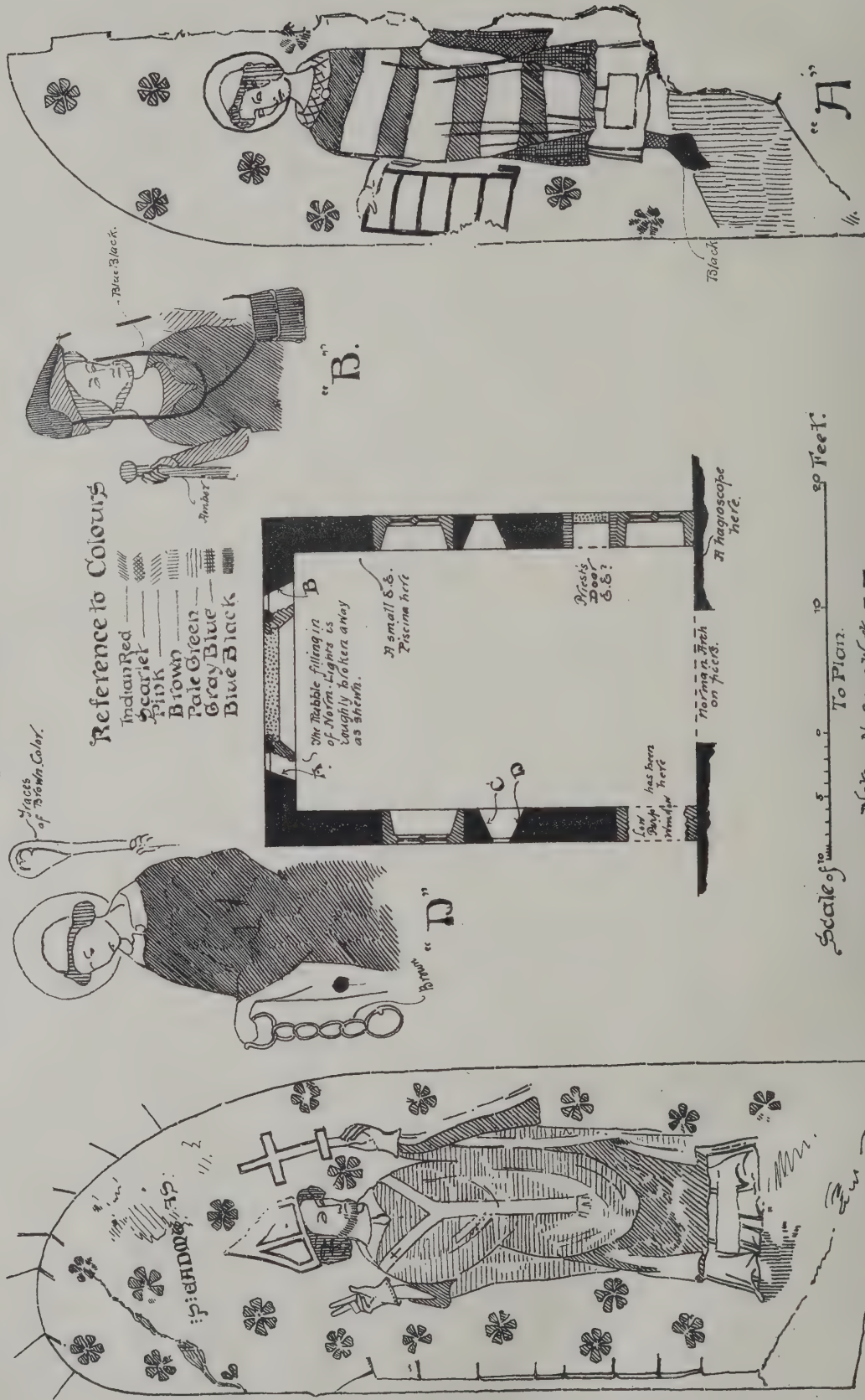
"A YOUNG ARTIST," who writes from Paris, has come to the aid of the "Aged Artist" who lately denounced the English art schools. "I work," says the writer, "in a large *atelier* in which there are students of every description, from absolute beginners to skilful artists, and I see one student fresh from a country village where she had literally had no teaching, beside another from one of the best-known British schools of art, at which she had taken high honours, both working from the same model with, according to the teacher's opinion, very equal skill. No doubt the latter is an adept at 'stippling,' but as that is an accomplishment little appreciated, except in South Kensington circles, it profits her nothing. I cite not from one instance, but from many. Girls from British schools of art are invariably considered mere beginners, and that from no prejudice, but because they show themselves incapable of drawing a human face. 'An Aged Artist' attributes the small results of our Government schools of Art to the badness of their system. From my own observation I venture on the bold assertion that the teachers are even worse than the system, though I believe this to proceed from an integral part of the system which very much narrows the field for the selection of teachers. I have myself been taught by several schools of art teachers, with the result that I have since had to unlearn all I learnt from them, and I have seen the works of others who hold high appointments, and certainly were they private teachers no parent would confide his children's instruction to them on testimony of their works." All this seems to be beside the question. In every school there are students to whom progress is almost impossible, and the "Young Artist" may have been one of them. The Government schools can point to several eminent painters as evidence of the value of what is taught under the Department.







# FRINDESBURY CHURCH: KENT. Frescoes DISCOVERED IN RESTORATION JUNE 1883.



D. M. Johnston del.  
June 1883.

Scale of 1" = 5' To Plan. 50 Feet.

Note Norman Work = ■  
E.E. = ■■■  
Pispa. = ■■■■  
Brick Blocking = ■■■■









ROCHDALE  
BOARD SCHOOLS  
AT HARELANDS

MESS<sup>rs</sup> MANCINN & LITTLEWOODS  
ARCHITECTS - MANCHESTER

St. George & Co. 22, Market Lane, Camden St. E.C.









ALMSHOUSES &  
[ ERECTED  
J S



22<sup>nd</sup> 1883.



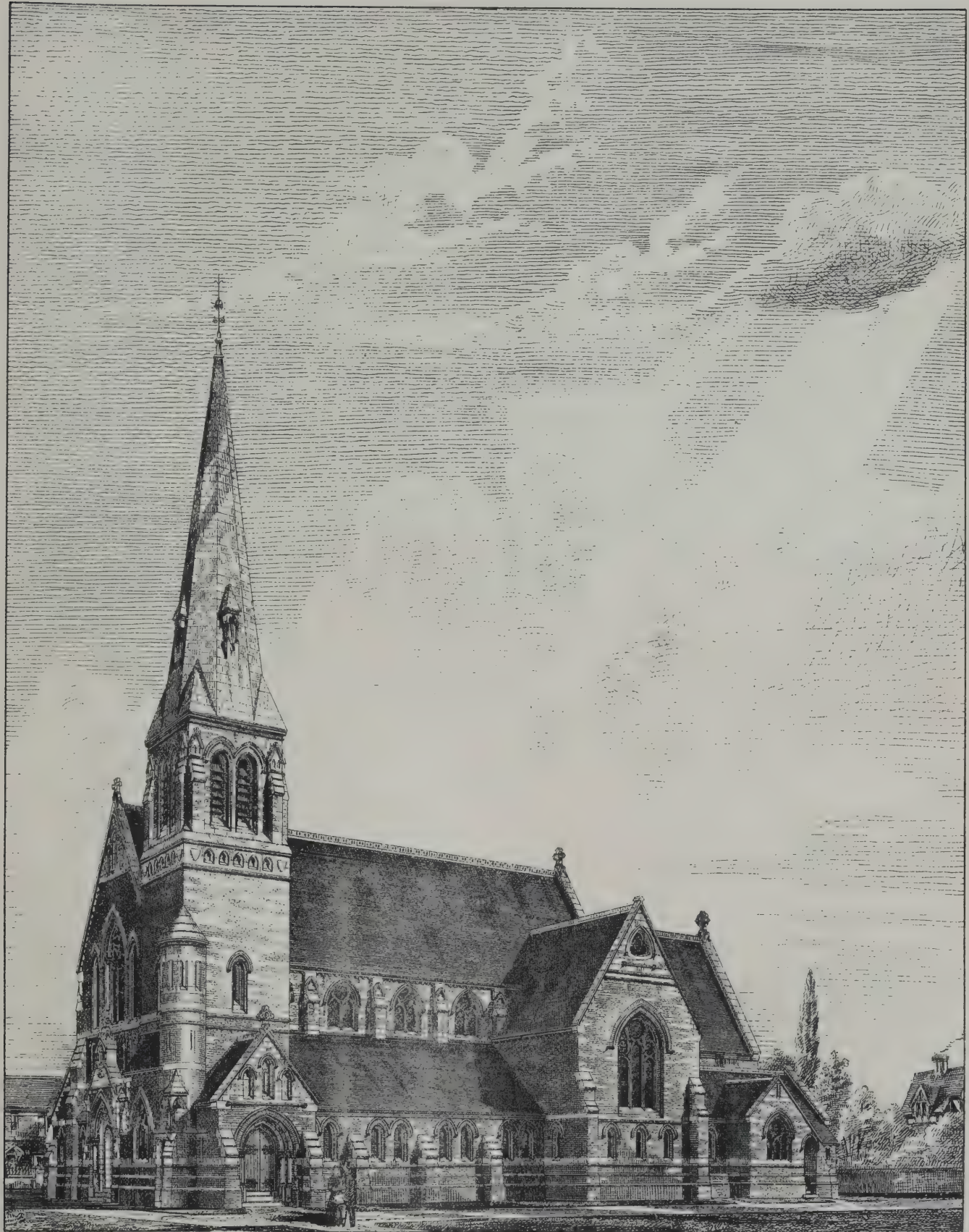
EL. TURVEY. BEDS.  
RTON ESQ.)  
HITECI







The Architect, Dec<sup>r</sup> 22<sup>nd</sup> 1883.



DESIGN FOR PROPOSED CHURCH OF ALL SAINTS, IPSWICH.

By WILLIAM WYKES, ARCHITECT

*Printed & Co. 22, Mark Lane, London, E.C.*









MISSION HALL, ST. MARGARETS, TWICKENHAM.

THOS R. RICHARDS ARCHT.



MISSION ROOM, BRAMMA ST., LEEDS.

MESSRS SMITH & TWEEDALE, ARCHT.







## ILLUSTRATIONS.

## ALMSHOUSES WITH CHAPEL OR HALL, TURVEY, BEDFORDSHIRE.

THESE almshouses are now in course of erection for Mr. JAMES BARTON, of Oakley House, Camden Road, and Oxford Street, London, and will be permanently endowed by him. They are intended for twenty pensioners—ten married and ten single. Each tenement will accommodate four inmates, each having a separate living room and bedroom, with use of kitchen and scullery combined, and washhouses. The central portion of the building is intended and fitted up for the use of the superintendent of the institution. The buildings are in the Tudor style, with a frontage of 200 feet, and have a south aspect. The materials used for the facings throughout are red bricks, with bands of Luton greys and Bath stone dressings. The roofs will be covered with Bangor slates laid on boarding and felt, and with COOPER'S terra-cotta ridges. The glazing generally will be in quarry lights, the centre of the building having an oriel window on the first floor for the board-room, with ante-rooms and other conveniences, above which will be a turret clock by BENSON. The external doors are of English oak, with ornamental wrought-iron strap-hinges, handles, and latches.

An important feature in the ground plan is the large hall in the rear of the central block, intended for holding religious services and entertainments. There will be three three-light windows on each side, and the glazing will be in quarry lights, with upper parts in coloured glass. At one end is a chamber to receive a new organ of two full-compass manuals and independent pedals in oak case, with decorated 8-feet open diapason pipes in front, above which will be a circular stained-glass window, and on either side of the organ are ante-rooms. The organ is by Messrs. GRAY & DAVISON, of Euston Road. At the other end, approached from the board-room floor, is a small private gallery, running the entire width of the hall. The construction of the roof is of English oak timber, panelled throughout in best pitch pine, stained and varnished, and surmounted with a *flèche* for ventilation, covered with copper. There will be a dado round the interior, the walls above which will be distempered and coloured. Provision has been made for ventilating, and the warming will be effected by the introduction of hot-water pipes arranged in tiers, two on either side and at entrance. The hall and its approaches will be lighted by gas.

Upon the same estate several well-designed villa residences, with modern improvements, are being erected, for the occupation of persons wishing to avail themselves of the great educational privileges of the Harper Charity Schools at Bedford without the burden of high rents, rates, and taxes. The above are built adjoining the Pict Hill Estate, belonging to Mr. W. F. HIGGINS. The sites are high and dry, the neighbourhood particularly picturesque, commanding views of rich woodland beauty. The interesting village of Turvey, for many years the scene of the labours and ministry of the late Rev. LEIGH RICHMOND (author of "The Annals of the Poor," containing "The Dairyman's Daughter" and "Young Cottager"), is reached by Midland Railway from London—a distance of fifty-six miles—in an hour and a quarter. Close by are Olney and Weston Underwood, where once resided the poet WILLIAM COWPER.

The contractor for the almshouses is Mr. SAMUEL FOSTER, of Kempston, Beds. The clerk of works is Mr. WOLLORD. The entire works are being carried out from the designs and under the superintendence of Mr. J. S. MOYE, architect, 3 Southwick Street, Hyde Park Square, London.

## NEW BOARD SCHOOLS, ROCHDALE.

THE Rochdale School Board advertised for competition drawings for the erection of new schools to accommodate 500 children, and about thirty-eight architects responded to the appeal. The committee selected the design with the motto "Utility," by Messrs. MANGNALL & LITTLEWOODS, architects, Manchester, who were instructed to procure estimates and carry the work out, which is now finished and occupied. The contract was let to Messrs. PETERS & SONS, contractors, Rochdale, the total amount being under 5,000*l.*, including fittings and architects' commission.

We give view and plan. The mixed school for boys and girls is situated at the south end of the site in Derby Street, and is 60 feet in length by 20 feet in width and 20 feet in

height, and accommodates 120 scholars, allowing 10 feet of floor space for each scholar. Directly communicating with the school-room are four class-rooms, two of which will accommodate fifty-five, and the other two thirty-five scholars, each allowing 10 feet of floor space for each scholar. Hat and cloak-rooms and lavatories are provided for each sex in immediate connection with the entrances. The infants' school is situated at the north end of the site in Derby Street, the principal approach being from this end. The school is 48 feet in length by 20 feet in width and 20 feet in height, accommodating 120 children, allowing 8 feet of floor space for each. Two class-rooms, each accommodating forty children, communicate directly with the school-room. A white glazed brick dado, 4 feet high, will go round each school-room and class-room, which will have a pale green tinted band of another colour at the top and bottom. The ceilings to each school will be splayed on each side. The roof principals, being exposed to view, are in pitch pine, varnished. The boys' and girls' latrines are situated adjoining the west boundary wall, and will be on the dry-earth closet system and well ventilated. The infants' latrines are situated near to the back school entrance, and are approached by a covered passage.

The schools and class-rooms are to be heated by hot-water pipes. A louvred ventilating-shaft is fixed on the roof over each school, and communicates with openings in the ceilings regulated by doors, which open and close with pulley and cord. Fresh air is introduced every few feet along the walls of each school, at a height of about 7 feet above the floor, by means of SHERRINGHAM'S ventilators, and foul air is to be taken out at the ceiling level through BOYLE'S talc ventilators. The windows are also adapted for the free admission of fresh air by the simple plan of hanging the top part to fall inwards (regulated by cord and pulley), and the lower parts being sashes, afford means of cleaning.

The elevations are faced with red stock bricks, red terra-cotta being extensively used for the ornamental work, with masonry sparingly introduced where most required to throw off the water—namely, to string courses and sills and the upper part of cornices. The roofs are covered with green Welsh slates fixed to yellow pine sawn battens. The ridges are of red Staffordshire crested tiles. The internal joiner's work, such as doors, &c., are of pitch pine, varnished.

## MISSION ROOM, LEEDS.

THE exterior elevations to Brama Street and Park Court, which are very similar, are built of red pressed bricks with sandstone dressings. The interior of the large room is also lined with red brick, the heads, sills, jambs, and mullions all being moulded, and of stone internally as externally. There is a class-room provided, also a kitchen with special appliances for the preparation of teas. The hot-water pipes are heated by a gas furnace in the basement, and the building is ventilated throughout on ELLISON'S system. The architects are Messrs. S. E. SMITH and J. TWEEDALE, of Leeds.

## MISSION HALL, ST. MARGARET'S, TWICKENHAM.

THIS building, which was recently opened, has been erected from the designs of Mr. THOMAS R. RICHARDS, architect, 17 King Street, Cheapside, by Mr. F. SIMPSON, of Richmond. The interior has been made attractive in appearance. The whole of the woodwork is stained and varnished, and the windows are filled in with cathedral glass of varied tints. The building owes its existence mainly to the liberality of the honorary pastor of the Twickenham Baptist chapel, Mr. E. H. BROWN, who generously contributed one-half the cost.

## THE DESIGN FOR ALL SAINTS CHURCH, IPSWICH.

IN this design the church was made cruciform on plan, and has north and south porches, west entrance and tower at south-west angle, with baptistery in lower part of same; the transepts are shallow, and so arranged that an uninterrupted view of chancel may be obtained therefrom. Ministers' and choir vestries are provided, with separate entrance thereto, and with strong closet, lavatories, &c., in connection therewith, and heating chamber underneath. The organ is placed in north choir transept, and would be visible from all parts of the church. The nave has an open-timbered roof boarded on back of rafters, the lean-to roofs of aisles are treated inside to appear as span roofs, and the nave arches are groined into



same. The waggon roof of chancel is boarded and panelled with enrichments at intersections of ribs, &c., and all the roofs would be covered with tiles. The interior walling would be of buff, and the exterior of local red brick with moulded brick strings, &c., and Bath stone dressings. The broad spire also would be of Bath stone. The floor of church under pews would be laid with wood bricks on bed of concrete, the aisles, chancel, &c., having tile paving. The church would be exceedingly well lighted, ventilated, and heated, and the cost of the portion intended to be first erected would not have exceeded the stipulated sum. The architect is Mr. WILLIAM WYKES, of 124 Colmore Row, Birmingham.

#### MURAL PAINTINGS.

THE curious paintings shown in the illustration have been lately discovered in Frindesbury church, Kent. The sketch is by Mr. P. M. JOHNSTON.

#### ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE fourth ordinary meeting of the Institute was held on Monday evening, Mr. Horace Jones, president, in the chair. A paper was read by Mr. E. J. Tarver, on

#### English Architecture and Monuments of the Sixteenth and Seventeenth Centuries.

Mr. TARVER said he was led to the consideration of this subject by the course of lectures on the history of architecture he was now giving for the third session to the students of the Architectural Association, with the object of helping them to prepare themselves for the examination of the Institute, and for admission as associates. He had found when coming to the lecture on English Renaissance a difficulty that always existed in pointing out a successive development of the features of this style—if style it might be called, which combined the elements of two such antagonistic principles as were implied by Classic and Gothic design. At all former periods, after making due allowance for local varieties, the style throughout most countries—or, at all events, large districts—was more or less uniform, having been arrived at by a system of natural selection of obvious improvements as the need for them arose, and by a corresponding system of discarding such features and treatments as had been thus improved upon. In the period under consideration, on the contrary, architectural style was as much a matter of fashion as the literature of the day, and it had since then gone through more astonishing changes than were ever dreamt of even in the most fanciful days of James I. It would be admitted by most, though not by all architects, that the Gothic style as it existed at the beginning of the sixteenth century was capable of improvement—at all events in its details. While recognising the great merits of the general design of the buildings as a whole, and the care and forethought exercised in arranging the various threads that were to spread over a church interior from floor to roof without a single breach of continuity, it would be found that this system was the result of calculation rather than imagination, whereas both these elements were necessary to good architecture. Sense appeared to have been deadened in detail even more than in mass, as might be seen in the heavy and “lumpy” treatment of the canopy-work of Bishop Alcock’s Chapel at Ely Cathedral. Whence was the improvement to come? A comparison of this chapel with the companion chapel at the opposite side of the cathedral, erected by Bishop West, would prove that it certainly had come, in the course of thirty years, and in the shape of a finer sense of form acting upon the very same Gothic features that were then in vogue. The very plan of the pedestal was poetical as compared with its neighbours, and this feeling seems to have been carried throughout the whole treatment, even to the section of the mouldings. The explanation was that a new influence had been at work in the meantime, as might be learnt from the late Sir Digby Wyatt’s paper, read before the Institute in May 1868, entitled “The Foreign Artists employed in England during the Sixteenth Century.” This employment of foreign talent was a luxury indulged in chiefly by the rich; so it was not surprising to find that it escaped the architecture of out-of-the-way places, and that a style which cannot be called anything else than Gothic, however debased, survived in such places even up to the last century. Amongst the works which might be classed as luxuries were sepulchral monuments, and it appeared to the lecturer that, if any successive fashions were followed, they would be recognisable in these, which were, in many cases, architectural compositions; and further, that the headquarters of such fashions would be in London, and especially in Westminster Abbey. He had, therefore, looked about for a chronological list of these monuments; but, not finding one, he compiled a list from the little guide-book which is said to have received the approval of the late Dean Stanley, and then went steadily through the list, and visited each monument in order, noting the fresh features, not of the figures, but of the architecture,

as they appeared to have been introduced. In doing this, a fair margin had to be allowed for the time that elapsed between the death of the individual and the erection of the monument. Thus, when copying the date off a building, you know where you were, but the date of a monument was not conclusive evidence. In this dilemma, the lecturer applied to Dean Bradley for permission to see any register that might have been kept of the erection of the monuments, and was referred to the chapter clerk, who, however, was unable to help him. Assuming, however, that the monuments followed, on an average, within a few years of the death of the individuals, there was a fairly consecutive series to judge from. Mr. Tarver then proceeded to enumerate the monuments and their particulars, and afterwards compared them with the architecture of the period with which they were contemporary.

The monuments enumerated made up a long list. Among those referred to by Mr. Tarver was that of Dr. John Young (1516) in the Rolls Chapel, Chancery Lane. This was the first of several on which Torregiano was employed. There was no doubt concerning the Renaissance character of the monument, which had not a vestige of Gothic about it. The figure was executed in terra-cotta. The idea was that Torregiano was employed by Henry VIII. on it, previous to trying his hand on the more important one of Henry’s royal father. The monument of Ann of Cleves, who died in 1557, was interesting as introducing us to an acclimatised style, in which first appeared converging and diverging scrolls. In Lady Jane Seymour’s (1560) the ornament was characteristic of jewel work. That of Margaret Douglas, Countess of Lennox (1577) was the first example of an obelisk, and a monument of this period in St. Margaret’s, Westminster, had an hour-glass above it. About this time (1590) the delicacy to which jewel decoration had been carried could be seen in Blanche Parry’s monument, St. Margaret’s, Westminster; also could be first observed the return of the convex moulding under the pilasters, which quite altered the character of the work. This double moulding occurred also later as a cornice. In tracing the monuments downwards, Mr. Tarver pointed out the development in style that had been carried on, with a healthy freedom from slavish adherence to precedents, &c. The monument of Lord Norris (1601) stood clear of the wall, and was surmounted by a canopy. That of Queen Elizabeth was perhaps the most important of any up to date, and one great improvement in it was a feeling of stability observable in the canopy that was wanting in the canopy of Lord Norris’s monument. Mary Queen of Scots’ monument, carried out more than twenty years after her violent death, agreed with that of Elizabeth in form and composition.

In that of Sir George and Lady Elizabeth Fane a pair of curtains drawn aside appear, and in that of Sir Christopher Hatton and his lady the figures occupied a novel position. Francis Hollis (1622) appeared in Roman armour. Sir George Holles’ monument (1628) showed a figure in plate armour, surmounted by a warrior in Roman armour. In 1628 the use of Ionic columns occurred for the first time. The Countess of Buckingham’s and her husband Sir George Villiers’ was a specimen of what became common in churchyard tombstones quite a hundred years later. In 1635 swags and draperies were getting mixed. Ben Jonson’s (1637) was a monument remarkable for its simplicity. At this time the architecture was becoming subordinate to the sculpture. The monument of Francis Lord Cottington (1652), in black marble, was of exceptional design, characterised by a delicacy and refinement which was indicative of great thoughtfulness. The list terminated with the monument of Lady Grace Gethen (1697), when Mr. Tarver proceeded to examine examples taken from various counties in England.

The paper was illustrated by a large series of architectural and monumental drawings, the latter being placed beneath the architecture corresponding to the period, and arranged as far as possible in chronological sequence.

Mr. WYATT PAPWORTH moved a vote of thanks to Mr. Tarver, who, he said, had referred to his book in terms of praise. The gradation in the monuments laid before them by Mr. Tarver was novel and most interesting, but hardly enough justice had, he thought, been done to the architecture, the buildings referred to being scarcely of sufficient importance to class with the monuments—such monuments, in particular, as those of Mary Queen of Scots and Elizabeth. No buildings were mentioned that could be ranked with them for comparison. While compiling his work he had not been able to find any names of the designers of the monuments. A few supposititious names of architects were met with, and the names of John Thorp and Inigo Jones were put to a considerable number. Whether the architecture should be attributed to them was doubtful. Many buildings begun and finished since the death of Inigo Jones occurred in one of the published lists of Inigo Jones’s works. As to the authors of these monuments, he would say they were done by clever carvers—sculptors we should call them—and not designed by any architect; the buildings themselves being designed by architects. There was a great difference between London and country monuments, more real art being seen in the London ones, though occasionally some might have been sent into the country from London. Mr. Papworth said he had come across the plan of Eltham Palace, made by John Thorp. His name was not to be found in any reliable work, so that he



should be interested to know whether search among Government records, &c., would throw any light on the subject. The first work attributed to him was in 1560, and the latest 1612. The arrangement of the orders in the monuments was curious, and the use of the Ionic order commencing at so late a period required a little more search to see whether or no it was merely accidental.

Mr. E. C. ROBINS, F.S.A., seconded the vote. Referring to Mr. Tarver having mentioned Brinscombe Manor House as the only example of a building in which Inigo Jones employed mullions and transoms, Mr. Robins described a building in Gloucestershire where Inigo Jones introduced mullioned windows. The central portion of the building had been refronted by Inigo Jones, who introduced a Classic moulding as a cornice. The plan of the work followed the old lines, but the details were Classicised.

Mr. F. DOLLMAN said that up to the time of the religious convulsion in this country the monumental figures were always recumbent, with the hands folded in attitude of prayer. After that the figure began to move, but the idea of devotion did not seem to have altogether disappeared, and the figures were generally in a kneeling position. That afterwards gave way to what was intended for an attitude of meditation. This continued for some time, and then we came to the period of long flowing wigs and Roman togæ. Later again the figures came into a sitting posture, and last of all the figure rose up in majesty of self-assertion. These were the gradual changes that had taken place since the sixteenth century. A like change could be traced in the inscriptions from the early and brief ones, such as "*cujus animam propitiatur Deus*," to long Latin inscriptions, and the equally fulsome English ones, to the later ribald inscriptions, and those in the style of "suffering long time he bore," &c.

Mr. C. F. HAYWARD, F.S.A., remarked that it would be labour well spent to take note of such monuments as still remained, and recommended it as a task for the Society for preserving these memorials. Mr. Hayward thought that Mr. Tarver might have taken note also of the change in materials. The house at Sutton Place, Woking, was a splendid example of the use of terra-cotta, but no building had gone so far in the matter of Italian detail as Layer Marney Hall in Essex. The windows were mullioned; but instead of being Gothic-formed mullions, they were formed with pilasters, &c., and the heads were formed of dolphins instead of the usual trefoil heads. At Sutton the trefoil, cinquefoil heads, &c., occurred where Italian work and thought was uppermost. It was curious that such a wave of Italian influence had, so it seemed, swept over this obscure country corner, and to have been developed there as it had not been developed in any other part of England. A peculiar thing was the frequent introduction of dolphins, and their being so thoroughly worked up among the Italian details brought over to this country. In the tombs of Prior Draper and the Countess of Salisbury, in the Chantry chapels of Christchurch, Hants, Gothic detail was seen side by side with the most perfect Italian ornament, as though Goth and Italian had worked alongside of each other. Referring, again, to the terra-cotta, Mr. Hayward noted the perfect condition of that at Layer Marney before mentioned, and said he would like to know who made the terra-cotta. Was it made in England, or brought in from abroad? Investigations had, he believed, been made in fields in the neighbourhood to see whether the remains of kilns or such like could be discovered, and thus indicate the production of terra-cotta on the spot. If brought over, some record should exist of the fact. He believed there was some hope of getting some definite information, as an investigation of the rolls was being conducted.

Mr. EWAN CHRISTIAN said that the terra-cotta had probably been produced in the immediate neighbourhood, where moulded brickwork had been carried out from the thirteenth to the seventeenth century. He had found perfect mullions of terra-cotta in many old churches. In the church at Coggeshall—an ancient church—would be found most beautiful details of the thirteenth century, all in moulded terra-cotta, and the whole of that district abounded in materials for producing terra-cotta. Possibly the artists might have been brought from Italy to do the final work. A thing that struck him in the course of the paper was the enormous extent of this little island. Coming from New York a few years back, he astonished an American by saying how large a place England was. It might be merely a speck compared to the vast American continent. He had travelled in England for forty years, and from north to south, from east to west, it was crammed with interest. Mr. Tarver had taken only a small range, but it would be a work of time to describe all the beautiful monuments in this country. One might go into any church in any part of the country and objects of interest would be found. Speaking of a beautiful seventeenth-century monument in Devonshire, Mr. Christian said he was sorry to state that it was much dilapidated, and that led him to mention one of the peculiar difficulties as to monuments, that after a time, and from want of care, they fell into a state of decay, and the representatives of the families could not be got to do the repairs. Inscriptions were rarely met with on mediæval monuments, after which one gradually came down to the time of vain people, who proclaimed their virtues in monumental inscriptions. It reminded him of the story of the little girl who asked where the bad people were buried, as she saw only good people.

Mr. R. PHENE SPIERS remarked that there were a large amount of objects in houses which would compare with these monuments better than any façade of a building, and asked whether the carvers of the tombs, chimney-pieces, &c., were not a special class of persons apart from architects. The learning of such sculptors was, he fancied, greater in former times than now, and their education of a higher rank. With regard to Longleat and John Thorp, a suggestion had been made some time back by a member of the Institute that some of John of Padua's work meant for another purpose had been got hold of and used at Longleat. The Marquis of Bath had taken up the suggestion, and appeared to have arrived at the belief that something of the sort had been done there.

Colonel PRENDERGAST said that the talent and intellect of the period under discussion which would naturally have been spent on architecture, was more or less taken up in works of monumental description. Church building was at a discount, and large chapels were gaping for furniture. Families were thriving on church property; money was consequently spent on the glorification of the family, and this would account for the large sums spent on monuments.

The PRESIDENT, in putting the vote to the meeting, remarked that according to popular opinion John of Padua and John Thorp were one and the same person. He also said that near Kingston there was a brickfield which was asserted to have been used for the works at Hampton Court Palace, but with what truth he could not say.

Mr. TARVER, in reply, said he thought that he had pointed out that the progress in regard of monuments all over England had been continuous, whereas architecture had chopped and changed about, at one time going forward, at another time going back.

## THE NATIONAL OPERA HOUSE.

THE report of the architect, Mr. Fowler, upon the proposed completion of the National Opera House on the Embankment, the first stone of which was laid by the Prince of Wales exactly eight years ago, gives some particulars regarding the structure of the building and the objects to which it is to be dedicated, in the event of the projected completion being accomplished. Fifty thousand pounds, it appears, have already been expended upon it, but the owners have agreed to grant a lease of the building as it stands, and so much of the site as is required for it, for 15,000*l.*, to be paid on completion in boxes or stalls. The estimated cost of completion is 55,000*l.*, but it is now proposed that the building shall be on a less elaborate scale than was intended, both as regards the interior and exterior, though it is to have the same spacious internal accommodation. It will be larger even than the famous La Scala, but very similar in design. Altogether, it will provide comfortable accommodation for about 3,000 persons, a larger number than can be accommodated in the Grand Opéra in Paris. Of these one thousand persons will be in the gallery. It is calculated that this great accommodation will permit the lessee to give opera at half the present Italian Opera prices. The structure will be fire-proof, and will comprise a promenade, refreshment rooms, and smoking divan on a grand scale. It is contemplated that access shall be given from the District Railway by a covered way. It is Mr. Mapleson's intention to give Italian, French, or German opera during the summer season. During the spring and autumn it will be devoted to English opera, while at Christmas it will pass into the hands of "an English theatrical manager, under whose care the national drama is to be cultivated."

## ORIENTAL ART AT SOUTH KENSINGTON.

IT is proposed by Sir Rutherford Alcock that the authorities at South Kensington should rearrange their collections by bringing together whatever is illustrative of Oriental art. They have at present in their keeping collections, not only of Arab and Saracenic, but also of Persian and Indian art. They have, moreover, a very considerable collection of objects equally illustrative of Chinese and Japanese art. It would thus be possible to place under one roof, easy of access and scientifically arranged with a view to educational influence, all the chief forms and types of art-work which have prevailed throughout Asia from the earliest periods. One of the first results of so desirable an arrangement would be to show incontrovertibly how much more constant and frequent had been in remote ages the interchange of thought and ideas among the various tribes and races occupying the vast continent stretching from the Mediterranean across to the Sea of Okotsk in the far East. And not only of ideas, but of goods, fabrics, and works of art. Hence the traces, neither few nor difficult to distinguish, of Greek and Egyptian types through Persia and across the Indus, following Alexander's track into India and Central Asia. The Buddhist religion in the eastern half of Asia, as later the Mussulman faith in the west, materially contributed to the same end of encouraging and facilitating intercourse and the



interchange of prevailing modes of thought and industrial arts. Marco Polo and his uncles were not the only merchants who carried from the Levant and the borders of the Bosphorus wares of Greek, Byzantine, and Saracenic origin to the other extremity of Asia, and often brought back to the west specimens of Eastern work, industrial and artistic. Hence the recurrence of similar types and forms is not more instructive than the divergences and contrasts to be found in the modification of typical forms and arts derived from alien sources but adopted and assimilated into something more consonant with the native habits of thought or national customs. But to follow out this scheme of study such a grouping of various collections in the same building is very necessary.

How much is to be gained by offering facilities for a study of this kind from an educational and an industrial point of view may be inferred from the example we have had of the all-prevailing influence of Japanese art over all Europe, which only dates from the first collection of Japanese objects exhibited in this country in the National Exhibition of 1862. Sir Rutherford Alcock was at that time the British Minister in Japan, and in the desire to see Japan, only then just open to Western nations, duly represented, he made as careful a selection as he could of all that would best illustrate the excellence and originality of the art and industries of the country. The Japan court in that Exhibition was one of the most popular. It was generally crowded, and when the Exhibition closed nearly all the articles were eagerly bought up. From that date, in an incredibly short time, every capital in Europe, and soon the country towns, became flooded with Japanese fabrics and wares of all kinds, to meet a sudden and widespread demand which to all appearance still continues, and "Japanesque" goods of all sorts, adaptations, or imitations by European workmen try in vain to displace the genuine or attract the public.

It is unnecessary to point out how much Europe owes to China and Japan—to the first for China ware (still so called as distinctive), to Japan for lacquer, unrivalled and beyond competition, and till previously unknown in the West. Nor have they been our benefactors and instructors in these alone; in silk fabrics and embroideries, in bronzes and Cloisonné enamels, we are still their inferiors, and the Japanese as workers in metals have not been approached by any Europeans. Nothing, therefore, is more likely to produce emulation and to nourish among our workmen and their employers the love of excellence for its own sake, and of works which are beautiful by reason of the originality of design and the perfection of workmanship with which the Eastern craftsman, and the Japanese above all others, is imbued, than to have constantly before them the produce of such love of art in fellow-workmen of another race, with whom it becomes a second nature. The educational value of a series of collections judiciously arranged, and which in its scope should include all Oriental art and industries, cannot be disputed. Ample space, good light, and judicious arrangement are the essential conditions. The objects being already in possession, nothing more is needed, and none of these requirements should present any insuperable difficulties to the authorities of the South Kensington Museum.

### THE LAW COURTS CLOCK.

THE clock and bells in the tower of the Royal Courts of Justice were set in motion on Tuesday. Mr. Street and Mr. Blomfield were absent, and the cord which held the pendulum was cut by Mr. James Gandy. The frame of the clock is of cast iron, 8 feet by 3 feet 6 inches, planed perfectly true; the wheels, of which the larger are 24 inches in diameter, are all of gun metal, turned, cut, and polished by machinery, the pinions being cut out of solid steel. The escapement is of the kind technically known as the "double, three-legged gravity escapement," and the compensating pendulum, beating two seconds at each swing, has a rod 15 feet long, formed of zinc and iron tubes, which, expanding or contracting unequally, are so arranged as to prevent changes of weather affecting the length of the pendulum. The "bob" weighs 3 cwt. The weights, composed of 63 cylindrical pieces of iron of  $\frac{1}{2}$ -cwt. each, threaded on iron rods, have a total weight of 1 ton 11 $\frac{1}{2}$  cwt., of which 4 $\frac{1}{2}$  cwt. serve to drive the hands, 10 cwt. work the machinery which causes the hour bell to strike, and the remaining 17 cwt. drive that of the quarter chimes. Steel wire ropes are employed. Other features in the clock worthy of notice are the improved "maintaining power" and the winding gear; the former to keep the clock going while it is being wound up and the latter providing a safeguard against injury to the works if the handle should be accidentally turned the wrong way, or if it should be necessary for any purpose to let the weights down while the clock was going. The bells which give out the St. Mary of Cambridge chimes hang in the belfry, a lofty apartment above the clock-room, and it is from the top of the massive oak frames which carry them that the projecting drum of the clock is entered. The weights of the bells are as follows: The chime bells are—note B, 12 cwt. 14 lb.; note A, 15 cwt. 3 qrs. 4 lb.; note G, 1 ton 1 cwt. 1 qr.; and note D, 2 tons 7 cwt. 2 qrs. The hour bell, giving C, is 3 tons 8 cwt. The total weight of the bells is 8 tons 4 cwt. 2 qrs.

18 lb. The hammer head striking the big tenor bell is 180 lb. in weight.

Messrs. Gillett and Co.'s patent remontoir train has been introduced, and will be of advantage to the public in enabling passers-by to set their watches to a second. The dial, which is 8 feet 6 inches diameter, has been cast in one piece, and in consequence the danger of segments breaking away is obviated, and strength is further given by bolting the two dials through the "drum" with strong iron tie-rods. The square ornamental drum is of gun-metal, and is the work of Messrs. Potter & Son. The transparent face is made up of plates of opal glass, which are set in a star-shaped iron framework. To illuminate the dial there are four horizontal gas-pipes, with eleven jets altogether. An automatic gas regulator has been introduced, and the rotation of two small wheels acts on "eccentric" calipers, so that, as the days shorten, the gas (which is never quite let out) is turned up earlier, or, as the days lengthen, later night by night throughout the year. The whole of the clockwork, dials, bells, bell-frame, &c., have been cast and fashioned from the raw material in the steam-power clock factory of Messrs. Gillett & Co., at Croydon, and the firm have undertaken the entire work and responsibility of placing the clock and bells in position in the tower. The clock is guaranteed to keep time within one second per week.

### INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884.

THE executive council of the Exhibition was appointed by H.R.H. the Prince of Wales, president; and consists of the Duke of Buckingham and Chandos, G.C.S.I., chairman; Sir James Paget, Bart., F.R.S., vice-chairman; Sir Frederick Abel, C.B., F.R.S.; Mr. Edward Birkbeck, M.P.; Dr. George Buchanan, F.R.S.; Sir Philip Cunliffe-Owen, K.C.M.G., C.B., C.I.E.; Sir Joseph Fayrer, K.C.S.I., M.D., L.L.D., F.R.S.; the Marquis of Hamilton; Mr. Ernest Hart; Sir John Lubbock, Bart., M.P., F.R.S.; the Right Hon. the Lord Mayor; Mr. Samuel Morley, M.P.; Dr. G. V. Poore; Lord Reay; and Sir John Rose, Bart., G.C.M.G. The secretary is Mr. Cunliffe-Owen, M.A.

This council is now meeting regularly, twice a week, at the Society of Arts House, by permission of the council of the Society. A large general committee is also in course of formation. From among the members of the general committee, the following sub-committees have been appointed: 1. The Dwelling; 2. Workshop and Factory Sanitation; 3. Food—raw materials; 4. Food and Cookery; 5. Heat; 6. School and Education; 7. Ambulance; 8. India; 9. Colonial. They will meet for the present at the Society of Arts, and will have under their superintendence the arrangements necessary for securing the efficient representation of the objects of the various sections of the Exhibition. It is announced that persons wishing to exhibit in any of the classes should apply to the secretary, Mr. E. Cunliffe-Owen, at the offices of the Exhibition, South Kensington. These offices, it may be added, are in the buildings formerly occupied by the Fisheries Exhibition.

### GREEK ART.

AN address on the history of art was delivered by the Rev. W. Greenwell at the distribution of prizes in the Durham School of Art. In the course of it he said:—

The nation that probably possessed the highest art instinct the world has ever seen, or possibly ever will see, was the great Greek nation—a nation consisting of a number of small States, some of them so small as almost to be represented by what we would call at the present day a largeish village. It did seem marvellous that little States like these, possessing a few thousand people and a few thousand acres in their territory, should have been a nation which has exercised in all times in the past, and will exercise to the end of time, an extraordinary influence both in art, in literature, in science, and in religion that the Greek race has done. No race seemed to him ever to have been so highly cultivated, mentally, as the Greeks. Of course, they did not get art from the Greeks entirely any more than from any other nation; but, as he had said before, it had spread itself from one country to another, originating probably with the first man; and, as it had passed from one nation to another, it had been very much modified and improved. The Greeks took the art which came to them from Egypt and from Assyria, and from the latter place it came to them in all ways. It came through the Phœnicians, it came through the country which is now called Asia Minor, now part of the Turkish dominions, where on the borders of the Ægean Sea, on the coasts of Asia Minor, and even on the coasts of the Black Sea, the land was occupied by settlements of Greeks. For the Greeks, like ourselves, were a great colonising people. They colonised the whole of the coasts of Asia Minor, they colonised a very considerable portion of North Africa; they colonised also all



the south of Italy; and, in fact, they sent colonists out to every part of the then known world. And due to their having colonised Asia Minor, and having a great number of flourishing States around its coasts, they there came in contact with other races. Art passed through these different races and through the Greek colonies to the natives of Greece, or rather he would not say natives, because probably the Greeks in many parts were only settlers there, but to that part of Greece with which they were so familiar by the names of Athens, Corinth, Sparta, and so on. The Greeks produced works of art of the very highest quality. In regard to their architecture, for its grand simplicity it has never been at all approached in a certain way; although, of course, he must modify that by paying some regard to what has been done in later times in Gothic architecture. But still he thought the great works of Greek architecture had never been surpassed or even rivalled in their grand simplicity. Besides that, they produced the very finest sculpture in the form of statues that has ever been seen. All the statues which have been produced in later times at the very best are mere imitations—and very poor imitations indeed—of Greek sculpture. We now only possess copies to a great extent which have been made in later times, but every person knew that a copy could not possess the merit of the original. We also possessed a certain number of original sculptures, but, unfortunately, in a very mutilated condition. Figures without heads, without legs, without arms, mere parts of the body, and so on. But these, even in their defective condition, showed such an extraordinary development of the very highest artistic feeling that one wondered how a man could ever have produced them. All Greek sculpture must be considered as idealised. No doubt they were in the habit of seeing forms of great beauty around them, just as we were in the habit of seeing forms of great beauty around us, though, of course, we do not see them as the Greeks did, as they lived in a very much warmer country than ours; therefore the body was more exposed, and more was seen of its great beauty than with us, who walk about every day clothed from head to foot. Not only in sculpture did the Greeks excel, but also in the application of art to various other objects. Probably most of them had seen what were called, and sometimes erroneously called, Etruscan vases. They were really Greek vases, and in that kind of work the Greeks had never been equalled. There was nothing like them to be found. If they took up a Greek vase, they would expect it to be very heavy, but they found that it was no weight at all. And yet it probably lasted from 500 years before Christ up to the present time. Referring to the Greek coinage, the speaker said this was also the most remarkable that the world has seen. Our coinage at its best was only equal to the very worst Greek coins; and as for our attempting to approach their finest works on their coins it was hopeless. He had seen imitations made by the best of our modern die sinkers, and when seen together, side by side, they would wonder that two persons could really make things so dissimilar. There must, of course, be some amount of exactness in the one as in the other, but the whole spirit of Greek art is entirely wanting in our modern coins.

#### RESTORATION IN NORTHAMPTONSHIRE.

THE annual report of the Northamptonshire Architectural Society gives a report of the restoration of churches of which the plans had been submitted to the committee of the society. At Long Buckby church it was proposed to improve the two aisles, added within the last century and a half, by putting on roofs and inserting windows, and building a south porch, all of good design. Yardley Hastings church had been visited by a sub-committee, to advise with the rector and Lord Northampton's agent, with a view to its partial restoration. The south aisle is to be rebuilt forthwith on the old lines, and sundry suggestions were offered by the sub-committee with reference to doors, windows, string-courses, &c. At Werrington church it was proposed to renew the roof over the nave, to insert new aisle windows, copying an old one now walled up, and to reseal the building throughout. Plans had been submitted to the committee for the building of new vestries at St. Edmund's, Northampton; and the report said that the foregoing were the only new cases which had been brought under the notice of the committee during the past year. The report went on to speak of Irthlingborough church, the condition of the tower of which was the cause of much anxiety to the committee. At the last annual meeting of the society, a sub-committee was appointed to examine the building. This they did in January last, and found the state of things there had lately much altered for the worse. A serious movement was evidently then going on, as indicated by the fall of stones within and without. To prevent injury to the walls the committee advised their removal. This advice was promptly acted upon by the churchwardens, and the walls had been taken down and removed a safe distance from the building. The opinion of Mr. Pearson, R.A., had been obtained, and was to the effect that the tower must come down and be rebuilt. Subsequently a committee of the Society for the Protection of Ancient Buildings visited Irthlingborough, and they too reported the tower to be in a very

critical condition, and they took for granted that it would not be allowed to fall, as in falling it would probably do untold damage to the adjoining church, fine vaulted crypt, &c., and endanger life. Their committee was opposed to the plan of rebuilding, and, among other things, suggested the carrying up of an octagon structure in brick within the present tower to support the lantern, and to tie the old crumbling tower walls to this new octagonal lining. The committee of the society, however, could not agree to the proposed lining of bricks, as it would only support four sides out of eight, and which would add enormously to the weight upon the foundations, which had already been tampered with in excavating for the adjoining crypt. Mr. Pearson had come to the same conclusion as the committee, and the latter trusted that the church authorities of Irthlingborough would lose no time in issuing their appeal for public aid, and in commencing the work of carefully taking down and rebuilding their fine tower and its elegant lantern. Earl's Barton tower was likewise inspected by the sub-committee, who found the old cracks and settlements apparently to be no more than they were three years ago. The vicar and churchwardens are fully aware that considerable repairs are necessary, and it was understood they were raising money for the purpose. The committee, however, regretted that in the circular issued by the new vicar no account was given of what was proposed to be done, nor under what supervision, but they had full confidence in the conservatism, as well as the practical skill of Mr. Carpenter, who had been employed in the repairs of the church, and had perfected plans of the parts of the tower affected by dislocation, as they existed a few years ago.

#### THE INSTITUTION OF CIVIL ENGINEERS.

THE annual general meeting of corporate members was held on Tuesday evening, December 18, Mr. Brunlees, F.R.S.E., president, in the chair, to receive a report from the outgoing council on the state and condition of the institution, and on the principal matters that had engaged their attention during the now expiring year.

It was stated in the report that, owing to the policy pursued by successive councils, the institution had become one of the most successful and prosperous of scientific societies, not only financially, but also in respect of the amount of professional knowledge diffused by its publications. The constitution was now sufficiently broad to include as corporate members all persons who had acquired eminence in the profession, or who, by their training and experience, were entitled to be considered civil engineers, whatever branch of engineering they might follow. The changes that had occurred in the several classes composing the institution, irrespective of the students, had included the transfer of 40 associate members to the class of members, and of 4 associates to that of associate members; the election of 1 honorary member, 41 members, 223 associate members, and 15 associates; and the restoration to the register of 3 associate members. The deductions arising from deaths, resignations, and erasures had been—1 honorary member, 33 members, 25 associate members, and 21 associates. The net result, therefore, was an increase of 48 members, and of 165 associate members, with a decrease of 10 associates, the honorary members remaining the same. The gross number on the books was 3,588, as against 3,385 twelve months ago, being an increase of 203, or at the rate of 6 per cent. During the session 81 students were elected associate members, and 175 candidates were admitted. The number of students now on the books was 722, as against 707 at the corresponding period last year.

It was stated that the large income now received was simply the result of growth in numbers, and was due to an increase in the subscriptions, which remained the same as in 1837, when the present scale was adopted, while the material advantages offered had in the interval increased tenfold. For five years the accounts had been so set forth as to show at a glance on the debit side the three items of income proper, capital, and trust funds, while on the credit side had also been given under three heads the general expenditure, investments, and trust fund disbursements. Five years ago these totals amounted to 14,230*l.* for receipts, and 14,450*l.* for expenditure; this year they were 17,578*l.* and 17,431*l.* respectively. The excess of income proper for the year 1883 over 1882 amounted to about 5½ per cent.

The invested funds of the institution now amounted to 43,250*l.* and of those under its charge as trusts to 14,642*l.*—together, 57,892*l.* Of these funds 16,893*l.* were in Government 3 per cents., and the remainder in 4 per cent. debenture stocks of the leading British railway companies.

In conclusion, the council thought that whether regard be had to the primary object of the institution—the advancement of the science of civil engineering—or whether it be had to the growth of the institution and to that of its funds, they might be looked upon as having faithfully discharged the trust confided to their care by this corporation.

The following gentlemen were elected to serve on the council for the ensuing year: President, Sir J. W. Bazalgette, C.B.;



vice-presidents, Sir Frederick Bramwell, F.R.S., Mr. E. Woods, Mr. G. B. Bruce, and Sir John Coode; other members of council, Mr. B. Baker, Mr. J. W. Barry, Mr. G. Berkley, Sir Henry Bessemer, F.R.S., Mr. E. A. Cowper, Sir J. N. Douglass, Mr. C. D. Fox, Mr. A. Giles, M.P., Mr. H. Hayter, Mr. W. Pole, F.R.S., Mr. W. H. Preece, F.R.S., Sir Robert Rawlinson, C.B., Sir E. J. Reed, K.C.B., M.P., Sir W. Thomson, F.R.S., and Sir Joseph Whitworth, Bart., F.R.S.

### LOW CEILINGS.

A REPORT from Dr. Sedgwick Saunders, Medical Officer of Health for the City, was read at the meeting of the City Commission of Sewers, on Tuesday. In it he urged the Court to reconsider that portion of the plans for the artisans' dwellings about to be erected in Petticoat Square which had reference to the height of the rooms. By the sectional drawings the height was shown to be eight feet only in all the rooms above the ground floor. In Dr. Saunders's opinion, that was totally inadequate to the requirements of the people intended to be benefited by those dwellings. The Act clearly expressed that accommodation was to be provided for the same number of persons of the class, vocation, and habits of those who might be dispossessed under any given scheme, and it was obvious that the provision of less cubical space than that enjoyed in the dwellings demolished would be a step of lamentable retrogression unworthy of an enlightened sanitary authority, and establishing an example which he feared might be too readily followed by other Corporations. The rooms were to be occupied by families of the lower section of the artisan class, and they should not be less than nine or ten feet in height. He founded that judgment on the practical experience of the ill-effects of low ceilings. He was quite sensible of the difficulty that might arise in that direction after the Court had accepted the tenders for the buildings in Petticoat Square and after the plans had been submitted to the Home Secretary, but he desired to place on record that the dimensions, appliances, and ventilation of the rooms, and other kindred matters, had never in any shape or form been submitted to him as the medical officer.

### LIGHTNING CONDUCTORS.

THE lightning conductor on the spire of Chichester Cathedral was shattered and partially fused during a storm on November 26. The nature of the accident was scientifically investigated on the 11th inst. by two parties of eminent electricians—Major R. Y. Armstrong and Capt. Philip Cardew, of the Royal Engineers; Dr. R. J. Mann, F.R.A.S., ex-president of the Meteorological Society, and Mr. Anderson; and the following report has been prepared by Dr. Mann:—

The lightning conductor was put up sixteen years ago, when the new tower and spire were erected after the fall of the old one. The conductor is one of now obsolete form, which was known at that time as Pratt's patent. It consists of twelve No. 15 gauge copper wires, placed by side, and connected together by a zinc wire crossing the copper wires from side to side in a continuous zigzag.

The conductor was not materially injured for about 40 feet downwards from the terminal point. It was then scattered into short fragments of copper wire about half an inch long, or broken into contorted and twisted-up fragments, for another 100 feet, until it reached the lead flushing of the roof. Below that it was not materially injured. But a rain-water pipe, descending from the roof of the transept and about 12 feet or 15 feet from the conductor, and consisting of successive joints of lead pipe finally carried into one of the ordinary iron rain-pipes, was broken where the iron pipe received the lead. About 4 inches or 5 inches of the iron pipe was shattered and scattered into fragments, leaving a clear gap.

The cause of the accident is quite manifest. The conductor was not of sufficient capacity for its work. It weighed only 10½ oz. to the yard. It was also of essentially bad construction. The copper wires had been materially injured by galvanic action, set up and gradually carried on, where they were crossed by the zinc wire traversing them from side to side. The breaking of the copper wires into short lengths was in all probability due to this cause. They were ruptured where they had been weakened and reduced by the galvanic action. The 1¼ inch solid copper tape, ⅝ inch thick, which is the smallest conductor that should have been trusted for the protection of a structure of this height and size, weighs 36 oz. the yard. The conductor was not injured below the roof of the transept and nave, because the lead flushing, and the water-pipes connected with it along the side walls, had from that point begun to assist the conductor in carrying the lightning discharge down to the earth. That this had been the case was substantially proved by the damage done to the one iron water-pipe.

The earth-contact had been made by carrying the lower end of the conductor down into a narrow, bricked, well-like shaft, sunk

into the soil of the old grave yard, about a dozen feet from the point where the descending conductor reached the ground. There was considerably greater resistance in this earth-connection (about 70 ohms) than a well-appointed *paratonnerre* should have. This virtually increased the inefficiency of the conductor, but probably was of less immediate consequence than the very weak section of the conductor itself under the circumstance of the supplementary conducting power of the lead flushing and water-pipes already spoken of.

The conductor, inefficient as it was for satisfactory and permanent performance of its work, unquestionably rendered good service to the spire and tower in preventing mechanical mischief to the masonry there. The uninjured state of the upper stretch of conductor at the top of the spire is very remarkable. In all probability the terminal point of the conductor above had in some way assisted to relieve the tension there at the time of the discharge. The force of the discharge virtually fell upon the conductor lower than this, on the side of the spire. The disintegrating force is always most energetically exerted when, so to speak, the electrical blow falls.

The breaking-up of the copper wire into short lengths was very curious. It will be noticed how these short lengths correspond with the crossings of the waving zinc wire. I find nearly the whole of the fragments that I brought away have tapering and shelving extremities—not transverse fractures—as if they had been chemically corroded away there before the fracture.

### THE IRISH TRAMWAY ACT.

A PAPER on "The Development of Railway and Tramway Communication in Ireland" was read by Mr. H. T. Crook at the last meeting of the Institution of Civil Engineers of Ireland. The author said that, in consequence of the legislation of last session, by which the Treasury is empowered to guarantee, under certain circumstances, dividend to the extent of 2 per cent. on the capital of light railway and tramway companies, a great impetus has been given to the promotion of schemes for the further development of such communication in Ireland. Supposing that anything like a reasonable proportion of the schemes which are mooted should be sanctioned, there would be a probability that the districts which are already best supplied would swallow up the major portion of the Government guarantee. The authorities consider, however, that when the difficulties of procedure under the Acts come to be faced that there will be nothing like the general extension of railways and tramways which is expected. The preliminaries to obtaining powers to construct a line are formidable. There are no less than four authorities to be satisfied—the grand jury, the Privy Council, the Board of Works, and the Treasury—and under certain circumstances the promoters may, after all, have to go to Parliament for a confirmation order. Where the proposed line runs into two or more counties there will be different grand juries, with different views and different interests. The guaranteeing baronies have, in the event of the earnings of a tramway not covering the expenses of working or maintenance, to make up the deficiency; and also, under certain circumstances, in the case of non-completion by the promoting company, to bear the cost of finishing the works. They may be expected, therefore, to jealously watch the proceedings. There are almost unlimited possibilities of appeals, and it may be much doubted whether the preliminary expenditure will be in any considerable degree lessened by the Tramways Acts. The Acts, however, are valuable in other respects, as the powers conferred will materially reduce the cost of construction of lines of a subsidiary nature. Lines may now be constructed without costly bridges and accommodation works, and where practicable the public roads may be made use of. The formation of a large number of very small companies, each with its separate board of directors and staff of managers, engineers, and officials, is to be greatly deprecated. Short branch lines, except under rare and exceptional circumstances, have but a poor chance of earning sufficient to cover their expenses. Traffic is never all in one direction, and there are already far too many towns in Ireland which are provided with railway accommodation, but from which it is most difficult to get except in one direction. The value of railway communication has been too often exaggerated. It is not the railways that bring prosperity, but prosperity which brings the railways. From much that has been said and written on this head lately, it appears to be thought that any kind of a railway or tramway, however lightly or cheaply constructed, is better than none at all. The mere fact that the casual passenger and the small produce of a remote country town is conveyed to the main line of railway upon a train road, instead of by more old-fashioned means, will not preserve that town from decay. Letter-kenny and the towns and villages on that line were decreasing in population at such a rate as to bring them within measurable distance of extinction. They have now a railway. Whether one train a day will avert the impending doom remains to be seen, but the prospect of a paying traffic does not appear to be brilliant. To saddle the country with a number of cheaply-constructed and badly-equipped tramways, constructed with no particular regard to



the possibilities of extension and through traffic, would be a great mistake. It is scarcely possible to construct any kind of line which shall not be too costly in its maintenance, and which will be capable of development in the event of an increase in the traffic, much under 3,000*l.* per mile. But, of course, no hard and fast line can be drawn, so much depending upon the nature of the country. There are other difficulties which will have to be faced in the working of these light lines. There is the difficult question of terminable facilities at junctions with the great trunk lines; there is the repair of locomotives and rolling stock, an important consideration in the case of a line situated, say, in the wilds of Donegal, Clare, or Galway, far from any place where mechanical skill or the necessary works for the repair of such stock can be found. In cases of branch lines in such parts, where the traffic is not considerable, one or two locomotives would possibly be all that the exigencies of the traffic would require. Possibilities of disablement are a serious matter. It would have been better, possibly, if, after due inquiry into the requirements of the unsupplied districts, the Government had granted a sum of money for the construction of one or two experimental lines. It may be urged that it has always been held that it is best to leave the promotion and construction of railways and tramways to private enterprise. But the case is altered when the Government steps in by means of a guarantee. Then the nation has some right to require that means shall be taken to insure that the Imperial funds shall be expended to the greatest advantage. As it is, the possibility of many of the counties being saddled with a load of debt for the construction of entirely unremunerative lines is not to be contemplated without concern. Moreover, the cost of construction, owing to the various preliminary inquiries and separate management, will be much greater than if the lines had been decided upon after one general inquiry, and the work put up to public tender. The risks are so great that it is scarcely likely that the local ratepayers will undertake the promotion of many lines, and in many cases resort will have to be had to the "stranger and the speculative capitalist." Only those who are capitalists can afford to face the risks of such an undertaking, and for their work and risk they will rightly expect a proportionate return. An unnecessary fear has been expressed that much of the work will fall into their hands, but it is by them only that really large and important schemes can be carried through. The Legislature has in view apparently the possibility of the creation of an inordinate number of small independent companies, for the Act specially provides for the promotion, construction, and working of several tramways by the same company. Whether any material addition will be made to the mileage of railways by the presumed facilities of the new Act, time alone will show. That the procedure is exceedingly complicated and beset with difficulties is already being discovered.



#### Mr. Street and Christ Church Cathedral, Dublin.

SIR,—An issue on a point of veracity with your correspondent "Not an Architect," is scarcely worth pursuing. "Mr. Drew has a short memory. He, *less than a month ago*, stated that the crypt drains had no outlet until he provided one." Now my *statements* have been in writing to the Dean and Chapter, and published in all the Dublin papers for anyone "not an architect" to read. The statements were distinct, that the *drainage of the whole subsoil and site* of the cathedral, abounding in springs, required an outlet, and that the crypt drains and their outlet, 2 feet under the crypt floor, was insufficiently deep for this purpose. Consequently I made an outlet under the foundations 8 or 10 feet deeper. I have made no other statement or any different one these six months past. If I have been interviewed unawares within the past month by a "man in the street," at the domestic hearth, or, by the way, in railway or tram car, my anonymous interviewer has made confusion of the crypt drains and the *drainage of the whole subsoil of the site and precinct*. My memory, I believe, is of average tenacity, and my accuracy of statement, perhaps, more habitual than that of one "Not an Architect."

"Will Mr. Drew deny," &c.? adds your correspondent. Has Mr. Drew ever been asked by him, or could he have any motive to deny that the Caen stone on the north side and elsewhere is decaying deplorably? My opinion has been freely stated, reported, and published, that a more injudicious selection of stone for our Irish climate could not have been made, and that there was little excuse for overlooking its dissimilarity in texture, structure, and weathering qualities from the old stone which has weathered some centuries so well. Why should I be challenged to "deny that the strong-room had a lath-and-plaster ceiling"? I have had nothing to do with "denying" facts, except one erroneously stated that fifty or more letters had been written to Mr. Street *about the drains*. I am officially aware of some letters having been written to Mr.

Street on other subjects and remaining unanswered, not, as one may charitably think of one now dead, as intentional discourtesy on the part of an overtaxed and overworked man; a qualification, I may say by the way, not to be extended, however, to similar omissions on the part of his successor or representatives, not privileged with the prerogatives of either genius or superlative eminence by right of inheritance.

Let every man weigh the value of such shortcomings as "Not an Architect" would unearth against Mr. G. E. Street's eminence of character, and the merit, as a whole, of his noble restoration of Christ Church Cathedral, Dublin.

Yours obediently,

THOMAS DREW, R.H.A.

Chapter Room, Cathedral of the Holy Trinity,  
Dublin: December 18, 1883.

#### Extras in Contracts.

SIR,—May we ask the opinion of some of your readers on the following circumstances. We contracted to build a church conformably to plans and specification, the price to be paid in five instalments, the fourth to be paid on the completion of the building and on getting the inspector's certificate—a balance of 100*l.* to be retained by the employers for twelve months. The architect was employed as inspector, and was constantly on the ground, and from time to time made alterations and additions. These additions, amounting to about 250*l.*, were paid to us together with the fourth instalment. The architect on the completion of the work granted us a certificate that the work was done to his entire satisfaction, and after twelve months he granted another certificate that we were entitled to the 100*l.* The employers now refuse to pay the money, their plea being that a great part of the extras were executed without their sanction, and they want us to send third parties to decide the matter. We would wish to know in this case if they have any grounds for opening up the question of extras after they have settled with us for them, or have they any right to retain the money in face of the certificates? Can they insist on having other parties sent to examine the work? Does not the architect's certificate settle the matter finally?

Yours obediently,

TWO CONTRACTORS.

#### CHURCH BUILDING AND RESTORATION.

**Ipswich.**—The church of St. Mary-le-Elms, Ipswich, has been enlarged by the addition of a chancel and organ chamber, and lengthening the north aisle, the accommodation having been increased thereby by over 100 sittings. The west gallery has also been removed, opening up the tower arch with good effect. The chancel has an oak roof of single hammer-beam construction, the space between the principals being divided into panels by moulded ribs; above the battlemented collar-beams and in the spandrels of the moulded ribs of the principals is open tracery work. The ends of the hammer-beams are finished with carved angels with outspread wings, each figure bearing a different device. The cornice is enriched with angels and pateræ, and the lower portion is pierced with tracery. The choir fronts and clergy desks in oak are elaborately wrought and carved. The floor is of Italian mosaic. On either side of the altar are sedilia, and credence table and a new altar table is to be added from a design by the architect. A finely-proportioned chancel arch in stone, with moulded jambs and arch richly-carved on both sides with emblems of the *Passion, Death, and Ascension of Our Lord*, divide the chancel from the nave. The outside walling is faced with cracked flintwork with stone dressings. The style is Perpendicular. The whole of the work, including the carvings and other details, have been carried out from the designs and under the superintendence of Mr. E. F. Bisshopp, architect, of Ipswich. Mr. George Kenney, of Ipswich, was the general contractor, and he has well and carefully executed the work. The cost has been borne by the vicar, the Rev. L. O. Kenyon Stow.

#### SCHOOL BUILDINGS.

**Preston.**—A Wesleyan chapel and class-room are about to be erected at Longridge, Preston, from the plans and designs of Mr. David Grant, architect, Preston.

**Midgley.**—A chapel and school have been erected from the designs of Messrs. Thomas Horsfield & Son, architects, of Manchester, formerly of Midgley. The style of the new chapel is a combination of the Italian and Queen Anne. On the ground floor there is a school to accommodate over 300 scholars. At the rear, on the same floor, there are three class-rooms, and over these two larger ones. The contractors for the various works are: Mr. T. Pickles, Midgley, mason; joiner, Mr. E. Marsland, Booth; slater and



plasterer, Mr. J. Alderson, Luddenden; plumber glazier, Mr. J. Alderson, Luddenden Foot.

**Newington, Hull.**—The parish rooms and Sunday-schools in connection with the church of St. John the Baptist are now completed, and were opened on the 13th inst. by the vicar in the presence of over 400 people. The building is in St. George's Road, adjoining the church, and comprises a large room, three class-rooms, soup kitchen, &c., and has been erected by Mr. Mark Harper, contractor, Hull, from the designs and under the supervision of Mr. Edward Starr, architect, Chancery Buildings, Manor Street, Hull, the total cost being about 900*l*.

### ENGINEERING WORKS.

**The Mersey Tunnel.**—There now remains less than 200 yards of rock to be passed through between the two ends of the tunnel. The latest returns are as follows: By Colonel Beaumont's boring machine, on the Birkenhead side, 30 yards; by hand, on the Liverpool side, 7 yards. Spaces between the two tunnels at end of previous week, 232 yards; deducting 38 yards for the past week, there remains 194 yards still to be done. Operations are in constant progress day and night at eight faces of the rock; two at the extreme ends of the heading, two at the extreme landward ends of the tunnels under Lord Street, Liverpool, and Hamilton Street, Birkenhead; two at the river ends of the tunnels which are about to break through into the level heading in the central part of the river, and two faces which are being worked back from the central heading to meet the tunnels. In the course of a few days this junction will take place on the one side of the river, and a week or two later on the other side; so that the main tunnels will then be continuous on each side of the river from their landward extremities to the points now so nearly approaching each other, where they will meet under the river. By arrangement with the Corporations of Liverpool and Birkenhead, temporary ventilating shafts are being sunk in Lord Street, Liverpool, and Hamilton Street, Birkenhead, for the health and convenience of the workmen.

### ART WORKMANSHIP.

**Reredos and Pulpit.**—A reredos has been erected in St. Barnabas's Church, Linslade. It is of Corsehill red sandstone, the central part above the altar having a pediment enriched with carved cresting, and a finial at the apex. The central panel has a richly-moulded and cusped arch, with a mottled alabaster inlay, over which is a circular medallion containing the Agnus Dei. The panels on either side of it are square trefoil-headed, with inlay of alabaster. The wings, containing circular cinquefoiled cusped panels, inlaid with yellow Mansfield stone, have a rich running foliated frieze, with circular medallions at intervals, containing sacred emblems. The surbase of the wings is of Forest of Dean stone. In the same church a memorial pulpit has been erected, the upper part of the wainscot being richly carved, with some open panels; the lower portion, of Corsehill stone, with richly-carved capitals, containing various emblematic flowers and foliage. Both works were executed, from the designs of Mr. B. Edmund Ferrey, F.S.A., by Messrs. White & Sons, of Vauxhall Bridge Road.

### ARCHÆOLOGY.

**Discoveries at Taplow.**—Another interesting archæological discovery near Maidenhead, about 100 yards west of the Thames, has been made by Mr. Rutland, the honorary secretary of the Berks Archæological and Architectural Society, assisted by Dr. Joseph Stevens, of Reading. On opening a tumulus at "Batlyngmead" a singular building was found, containing a fireplace, in which, among other articles, was a quantity of buff pottery, coated with greenish-black glaze of the fourteenth century. This discovery indicated the period at which the building was formed, but gave little help in deciding who the occupants were. They could not have been people of a lowly station to have used pottery of the character found. Earthenware vessels were costly at that period, and even the nobility used chiefly vessels of silver, wood, or pewter, on account of their durability. Mr. Rutland is of opinion that, as Queen Elizabeth let the fishing of the Thames in parcels for periods of twenty-one years, the hut was the abode of a river ranger. It might have been the casual residence of a forester or ranger in the ancient forest of Windsor, which although nominally disafforested in the thirteenth century, virtually remained a forest for centuries after that time, as disafforestation did not mean the actual destruction of the forest, but the parcelling out of portions of it to those who had rendered service to the Crown and others, thus leading ultimately to its destruction. Flint flakes and other flint implements had been present, together with bones of ox, pig, horse, and red deer, and scraps of Romano-British pottery, similar to those in the mould of the recently-excavated Taplow mound on the opposite side of the river. This goes to prove, Mr. Rutland believes, that various people had frequented both sides of the

river from the earliest times, and that the Saxons in removing the materials of the hill to form the tumulus had unknowingly built up their mound with earth containing relics of earlier occupants of the hill.

### GENERAL.

**A Colossal Statue** of Lord Beaconsfield, by Mr. Birch, A.R.A., has been unveiled in front of St. George's Hall, Liverpool.

**Canon Lonsdale** on Tuesday evening delivered a lecture at the Lichfield School of Art on "Recollections of the Restoration of Lichfield Cathedral."

**Mr. E. A. Ward**, for several years a student in the Nottingham School of Art, has painted on commission an historical picture entitled *Baffled*, portraying the scene in Sir Walter Scott's "Woodstock" of Albert Lee before Cromwell when discovered as having impersonated Charles II., while the hunted king made good his escape.

**A Small Collection** of pictures belonging to the late Lord Chief Baron Kelly is to be sold to-day (Saturday) by Messrs. Christie & Manson.

**The late Mr. R. Newsham**, of Preston, has bequeathed to the Corporation of that town his collection of pictures, bronzes, &c., the value of which is said to be over 60,000*l*.

**Mr. A. Peebles, F.R.I.B.A.**, has been made a Life Governor of the Royal Caledonian Asylum, in recognition of his services as honorary architect to the institution.

**The Professorship of Geology** in Trinity College, Dublin, has been conferred by the academic council upon Mr. Sollis, of Bristol.

**An International Photographic Exhibition** was opened on Tuesday at the Fine Arts Academy, Clifton. It comprises nearly 900 exhibits from all parts of the kingdom, and from America, Germany, Russia, Japan, and Switzerland.

**Plans** have been prepared for a science school at Kidderminster, and it is proposed to obtain 4,000*l*. for carrying out the scheme.

**A Stained-glass Window**, placed in the western end of the old Norman nave in Rochester Cathedral as a memorial of those who fell in the campaigns in Afghanistan and Zululand, was unveiled on Wednesday.

**The Roman Catholic Church** at Leamington was destroyed by fire on Wednesday night. The church was erected at a cost of 10,000*l*. about eighteen years ago, and the building was richly decorated with frescoes, &c.

**The Bromsgrove School Board** at their last meeting decided to obtain plans for an infant school at Sidemoor.

**The Truro Cathedral Committee** have resolved to complete at once the south transept as a memorial to the late Bishop of Truro, now Archbishop of Canterbury. The proposal to have a copper roof for the cathedral has been abandoned on the ground of expense.

**A Baptismal Font**, designed by Mr. Lawrence Booth, of Manchester, has been presented to Christ Church, Walmersley.

**The Leeds School Board** are about to obtain a loan of 6,785*l*. for concreting playgrounds of the Board's schools.

**Plans** have been prepared for the restoration and enlargement of Holy Trinity Church, Blackpool.

**The Tower of Winterton Church** has been restored under the direction of Mr. H. Green, architect, of Norwich. The bells have also been recast and rehung. The tower is 120 feet in height, and is built of stone and flint-work.

**The Scotch Court of Session** on Wednesday gave judgment in favour of the Perth Town Council, in an action brought by that body to compel the North British Railway Company to remove the still standing portion of the Tay Bridge. An appeal to the House of Lords is expected.

**Messrs. Meakin & Dean**, of Hampstead, have obtained the contract for the Alnwick and Cornhill Railway.

**Mr. T. Forman**, of Kennington, has made arrangements for the supply of oak flooring,  $\frac{3}{4}$  inch, 1 inch, and  $1\frac{1}{4}$  inch thick, in narrow widths, to meet the demand for oak borderings for floors. The boards are cut from selected wainscot oak.

**Messrs. Archibald Smith & Stevens**, of James Works, Queen's Road, Battersea, have accepted the contract for the erection of two hydraulic balance passenger lifts—on Stevens & Major's principle—at the new Winchester House, Broad Street, City. These lifts will be among the tallest in London.

**Messrs. J. Boyd & Sons** have received the order for the new palm house at Glasnevin, county Dublin, from the Office of Works. It will be 100 feet long, 80 feet wide, and 65 feet high, and is to be completed by October 1, 1884.

**Mr. R. Adams** has just opened extensive show-rooms at 17 Blackman Street, Borough, for the sale of his patent hinges, door springs, &c.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, DECEMBER 22, 1883.

### TENDERS, ETC.

As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.

Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."

### EDITORIAL NOTICES.

The authors of signed articles and papers read in public must necessarily be held responsible for their contents.

No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.

Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.

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In order to meet the difficulty which constantly arises from subscribers in the United States omitting to advise the Publishing Office at the time they remit a Post Office Order for the amount of their Subscriptions, and also as a reply to frequent inquiries as to the best means of obtaining THE ARCHITECT in America, the Publisher desires to offer the following suggestions:—

To prevent the possibility of delay, and to enable the Post Office Order to be the more readily traced in the event of its miscarriage in transit, it is advisable in all cases to notify per following mail, the number, date, and location of the order.

### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 10 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250*l*. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

HOWDEN.—Jan. 5.—For System of Sewerage and Sewage Disposal. Mr. Henry Green, Assistant Clerk to the Rural Sanitary Authority, Howden.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

ST. PANCRAS.—Feb. 1.—Designs are invited for Buildings for Mortuary and Coroner's Court. Mr. T. Eccleston Gibb, Vestry Clerk, Vestry Hall, St. Pancras Road, N.W.

UXBRIDGE.—Jan. 31.—For System of Sewerage and Sewage Disposal. Mr. Charles Woodbridge, Clerk to the Rural Sanitary Authority, Uxbridge.

WALMER.—Jan. 21.—Designs are invited for Laying Out the Estate of St. Clare for Building Purposes. Messrs. W. & T. Denny, Walmer.

WOLVERHAMPTON.—Plans are required for the Erection of Volunteer Headquarters and Drill-hall. Major W. Blake Burke, Adjutant, Wolverhampton.

### CONTRACTS OPEN.

ACCRINGTON.—For Alterations and Additions at Rough Lea. Mr. H. Ross, Architect, 5 Birch Street, Accrington.

BLACKBURN.—Jan. 12.—For Wrought-iron Girders and Castings for Bridge over Blakewater. Mr. J. Braddon McCallum, Borough Engineer, Municipal Offices, Blackburn.

BLOXWICH.—Jan. 9.—For Alterations to Leamore Schools. Mr. S. Loxton, Architect, Park Street, Walsall.

BODMIN.—Dec. 31.—For Further Repairs and Restoration of Parish Church of St. Patrick. Mr. R. J. Withers, Architect, 11 Adam Street, Adelphi, W.C.

BOLTON.—Jan. 19.—For Construction of Outfall Sewage Works at the Hacken. The Borough Surveyor, Town Hall, Bolton.

BRADFORD.—Dec. 22.—For Building Warehouse, Stabling, and Cottages, in Carter Street. Mr. S. Jackson, Architect, 33 Kirkgate, Bradford.

CARDIFF.—Dec. 27.—For Building Engineering Works. The Wallsend Slipway and Engineering Company, Limited, 4 Mount Stuart Square, Cardiff.

CALLINGTON.—Dec. 27.—For Building Farm Houses. Mr. S. Rattenbury, Downgate, Stokeclimsland, Callington.

CHELMSFORD.—Dec. 28.—For Erection of Stabling, Iron Fencing, &c., at the Cattle Market. Mr. C. Pertwee, Surveyor, Bank Chambers, Chelmsford.

DEWSBURY.—Dec. 27.—For Rebuilding and Restoring Parish Church. Messrs. Kirk & Sons, Architects, Dewsbury. Mr. A. E. Street, M.A., and Mr. A. H. Kirk, Joint Architects.

DUKINFIELD.—For Ironwork, Girders, &c., for Fireproof Mill, for the Astley Mill Company. Messrs. Stott & Sons, 4 Corporation Street, Manchester.

DUMFRIES.—Dec. 31.—For Extension of Bridge over Highway at Passenger Station. Plans at the Engineer's Office, St. Enoch Station, Glasgow.

EAST WALKER.—Dec. 31.—For Building an Infants' School, and for Alterations and Additions to Board Schools. Mr. John Johnstone, Architect, 6 Clayton Street West, Newcastle-on-Tyne.

ECCLESFIELD.—Jan. 2.—For Heating Hillsborough Board School on the Low Pressure System. Messrs. Wilson & Masters, Architects, Sheffield.

ELGIN.—Dec. 24.—For Building Town Hall. Messrs. Matthews & Mackenzie, Architects, Aberdeen.

ELTHAM.—Jan. 10.—For Construction of Brick Sewer (14,000 feet). Sir J. W. Bazalgette, C.E., Metropolitan Board of Works, Spring Gardens, S.W.

EYEMOUTH.—Jan. 7.—For Building Mortuary, Forming Cemetery, &c. Mr. J. Donaldson, Eyemouth.

EYEMOUTH.—Jan. 8.—For Improvement Works to Harbour. Messrs. Thomas Meik & Sons, C.E., 6 York Place, Edinburgh.

EXETER.—Dec. 27.—For Additions to the Devon and Exeter Hospital for Out Patients. Mr. R. Medley Fulford, Architect, The Close, Exeter.

FOLESHILL.—For Reseating and other Works at Wesleyan Methodist Chapel, Bell Green. Messrs. Steane, Architects, 22 Little Park Street, Coventry.

GREAT CROSBY.—Dec. 24.—For Building Mortuary and Disinfecting Store. Mr. M. J. Hore, Clerk to the Local Board, Great Crosby.

GREAT HEATON.—Jan. 2.—For Removal of Bridge and Construction of New Bridge over the River Irk. Mr. William Radford, Bridgemaister, 1 Princess Street, Manchester.

HALIFAX.—Dec. 28.—For Building Premises for Liberal Club. Mr. James Farrar, Architect, Crossley's Building, 29 Northgate, Halifax.

HULL.—Jan. 17.—For Formation of Adit or Tunnel (one mile) from Springhead Pumping Station. Mr. D. Maxwell, Engineer, Town Hall, Hull.

INVERNESS.—Dec. 28.—For Building Villas in Adross Street. Mr. Alexander Ross, Architect, 42 Union Street, Inverness.

KEIGHLEY.—Dec. 29.—For Erection of Residence and Outbuildings Highfield Estate. Mr. J. B. Bailey, Architect, North Street, Keighley.

KING'S LYNN.—Dec. 22.—For Building Villa and Offices. Mr. E. J. Colman, Architect, Market Place, King's Lynn.

LEWISHAM.—Dec. 28.—For Building Swimming-baths, &c. Messrs. Wilson, Son, & Aldwinckle, 2 East India Avenue, Leadenhall Street, E.C.

LIBERTON.—Dec. 26.—For Building Public School and Teacher's Residence at Burdiehouse. Mr. D. Menzies, Architect, 39 York Place, Edinburgh.

LLANISHEN.—Dec. 31.—For Construction of Large Storage Reservoir with Embankments, Valve Well, Culverts, Gauge Basins, &c. Mr. J. A. B. Williams, C.E., Queen's Chambers, Queen Street, Cardiff.



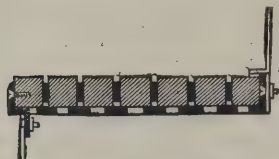
# LINDSAY'S

## IMPROVED PATENT REVERSIBLE TREADS & LANDINGS

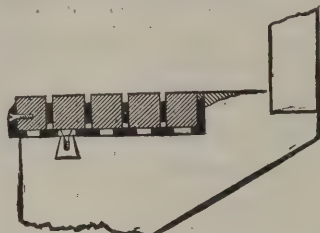
### FOR EVERY DESCRIPTION OF STAIRCASE.

THIS Patent is an improvement on the well-known wooden block construction, and its speciality is that the wooden blocks in each Tread can be removed and transposed so many times that it is almost indestructible besides being noiseless.

No. 3.—Section of Tread showing Iron Risers.



No. 6.—Sect. of Worn Stone Step nosed with Patent Tread.



No. 8.—Section of Tread reversed, the worn portion underneath, and new face presented for traffic. In this case the original level is maintained by iron grids that fit into the channels on the underside.



In Hospitals, or places where it is desirable to be free from dust, the blocks can be placed close together, not leaving any cracks, so that the treads or landings can be swept or washed quite clean; also, if it be necessary to get light under a Staircase or Landing, rough glass blocks can be fitted in the Iron frames, side by side with the wood, and a subdued light thus obtained.

Each Tread is so constructed that the wooden blocks of which it is composed can be removed by taking off the brass or iron nosing of the tray, so that when the outer edge of the wood is worn, the blocks can be taken from the front and those next the riser (which will be quite intact) substituted. The worn blocks, after being reversed, are slid into the position next the riser. This at once gives the tread the appearance of being quite new, and ready for prolonged wear. When in their turn the nosing blocks again become worn, the same operation can be effected by transposing the unused blocks from the sides of the tread to the front, and so on until all are in turn utilised. Finally, when in the course of years the wood is worn out, the trays can be re-filled at a very small cost; and if they should not require entire re-filling, can be re-nosed with new blocks for a few pence. Skilled labour is not required in removing or transposing the blocks. These advantages are so obvious that remark is superfluous, and the many years the Wooden-block Treads have proved their efficiency, places the durability of this construction beyond doubt. It has already been adopted by some of the leading Architects and Engineers. The Patentee generally uses Oak, Elm, or Teak, in these Treads, but, if an exceptionally durable Staircase is required, employs "Jarrah" (an Australian mahogany of extreme hardness), samples of which will be sent on application.

The Trays which contain the wooden blocks can be made of either wood or cast iron, the latter being, of course, superior. In either case they are in themselves complete, and only require wood or iron stringers to make a finished staircase. If necessary they can be constructed with strong lugs to build into wall, and fix like ordinary stone steps, only being less than one quarter the weight. In this case the balusters are fixed in sockets cast on the outer edge of trays. Particulars to be obtained from the Patentee, at the Works,

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# The Architect.

THE YEAR 1883.



ANOTHER old year is going off the stage; and in architecture, as in all else, it has done its duty. If the life of a man is to be measured not so much by its duration in time as by the amount of life's work that he has done, then, by the same rule, in the life of a cause, the year is to be measured by the amount of progress that has been achieved within its limits.

In architecture, therefore, as one of the grand historic enterprises of human intellect (let those who are not in the secret disparage it if they will), in England, as one of the most prominent headquarters of all that is intellectual, and in this Victorian Age of ours as the noblest in most intellectual respects of all the ages of the world's history, we may expect to see that such a year as the Year 1883 has lived a good deal of life within its twelve months, and done a good deal of work if we could trace it.

The most notable architectural movement that is on hand just now in England is the subsidence of the great wave of Gothic revival. There is another wave rising, of course; but the advance of this is not so well defined as the recession of the other. What is to be the precise end of the "Free Classic" enterprise does not seem to be quite clear; but the cessation of that interest in the Mediæval style which has played so bold a part for the last fifty years is as clear as anything can well be. The year which is now drawing to a close has not seen so much done in establishing the Free Classic as in disestablishing the Free Gothic.

The so-called Queen Anne fashion appears to be showing itself more and more distinctly to be in reality not a building so much as a furnishing fashion. It does not seem to be sufficiently well understood that it was in furniture that it began. Nearly twenty years ago, when Mr. EASTLAKE's name was becoming popular as a reformer of sideboards and couches on Mediævalist lines, it was understood that a mysterious enthusiasm was taking possession of a few architects of a very quiet although eccentric order, the ultimate aim of which was to direct the attention of the world—too frivolous to be trusted too soon with the secret—to the hidden merits of the chairs and tables of the early part of the seventeenth century. In course of time, while Mr. EASTLAKE's graceful style of writing was doing a good deal more to create dissatisfaction with the current work of our cabinet-makers than his best designs could accomplish in the way of its practical improvement, the new school, proceeding upon much less harsh and revolutionary principles, was slowly growing into notice. To take the leading fact as a familiar illustration, the quaint because crabbed articles of furniture which pertained to anywhere or nowhere in the days of our monks and knights were brought into competition with the quaint and not crabbed things which belonged to the industrious Netherlands in the days of our Dutch WILLIAM; and it was presently apparent that the worship of *bric-à-brac* had vastly more both to enjoy and to adapt under the one category than under the other. And so it came to pass, naturally enough, that the admirers of ecclesiastical and baronial architecture stopped short at the acceptance of the coarse ecclesiastical and baronial benches and boards of the fourteenth century for family use in the nineteenth, and consented to be charmed instead with those much more odd than inconvenient—indeed, sometimes not at all inconvenient—chairs and tables which the comfortable land of ditches and storks had produced, in its unobtrusive and substantial way, only a hundred and fifty years ago. Once recognised, the "Batavian grace" of this style of furniture came by degrees to be associated with the corresponding presentableness which was to be perceived in the finishings of building. Movable furniture led the eye to fixed furniture, and fixed furniture to structural detail. All were obviously of a piece, and the same satisfaction that was to be had in one branch was to be had in the others. Accordingly, if it seems that Queen Anne archi-

itecture is almost wholly a matter of detail, this is the reason why; and the tendency of progress in the mode is a tendency, therefore, towards the more elaborate development of detail. The architecture, in other words, is a furniture style; and, indeed, we might almost say that the development of its detail is simply a certain increasing thoroughness in the adaptation of the features of the cabinet-maker's work to the uses of the builder.

It is this style of architectural design, then, which is, as we think, not foreshadowing as yet so clearly as might be desired its eventual outcome. It is idle criticism that is content to ridicule its weak points; the laws of artistic development are at work here as in all other movements of transition; and there will sooner or later appear a definite resultant which will be the equivalent in a new form of the sum of its component forces. Perhaps it may be said that of these components, one is certainly the decadent revived Gothic. It is not less easy to say that another component is the anticipatory influence of a revival of Classic; but it would be more correct to suggest that it is rather some already active influence, of which the restoration of the modern European or Neo-classic mode, to enter on a new career, is to be itself the effect. Classic architecture seems to be certainly in the wind, but what form it is to take is still a question for speculation.

Recent municipal competitions ought to have done much to settle the direction in which a revival of Classic architecture may be looked for. Perhaps it is one of the essentials of the new system of competition that the old-fashioned exhibition of the designs must be avoided, and the aspirations of competitors kept down to the level of tradesmen's tenders, for the sake of evading the public criticism of the award; but at any rate we cannot help regretting that the Glasgow designs in particular were not in some way or other, with the cordial encouragement of the promoters and the professional adjudicators, openly exhibited *en masse*. It has been affirmed that nothing of much artistic moment would have resulted; but we venture to think it is scarcely possible that absolutely nothing should result, and we prefer to believe that, although Mr. YOUNG's plans might still have been found to be the best practical adaptation of the authorised scheme, it would nevertheless have been equally true to say that other designs, taken on their artistic merits, pointed the way to progress as Mr. YOUNG's does not, and pointed the way, be it observed, not for the sake of the project itself and within its own mere limits, but for the sake of the Art as a thing of national interest.

We are looking forward with some anxiety to the competition for the Admiralty and War Offices in this aspect of the case. Within a short time there will be delivered into the hands of the Government a large number, we have no doubt, of elaborate artistic compositions, designed for a national edifice on the largest and most imposing scale, and for a site which offers many advantages to able and ambitious architects. We cannot suppose it possible that an open exhibition to the professional world of the whole of this collection of art-work could fail to be of great educational importance. We earnestly hope that some way of meeting this object may be devised. If plagiarism is what is dreaded, let the plans of internal arrangement be kept back; it is the artistic effect alone that is so far the matter of public interest, and plagiarism, we think, will scarcely venture to trespass upon that particular field. And, after all, is it not, in architecture especially, those designers that are most afraid of being robbed who are generally the least worth robbing?

If the coming year is destined to witness any considerable advance in Classic architecture on English soil, what is to happen with Gothic? What we say is, of course, scarcely even a speculation, but, as we cannot forget the rumour that English clergymen have been recently making inquiries about the practicability of building Classic churches, is it possible that some NORMAN SHAW, in some Bedford Park, may before long be so bold as to model a church upon something like the lines of Sir CHRISTOPHER WREN? For the present we observe that in minor ecclesiastical work, such as schools, the customary "small" Gothic still keeps up the race with what is often equally small Queen Anne or Dutch; but this struggle is not worth much in any historical way, and in even larger buildings of a kindred class the case is scarcely more interesting. Gothic church-work, be it remembered, has had a long innings, and has done itself and England great credit; what is to follow, when it comes, must do well indeed if it is to deserve equal praise.



## GREEK SCULPTURE.\*

THE second volume of Mr. MURRAY'S "History of Greek Sculpture" has followed the first as quickly as was possible, considering the nature of the work and the difficulty of preparing illustrations. The new volume extends from the time of PHEIDIAS to that of the Greco-Roman sculptors of portraits. It is illustrated by various kinds of plates and cuts, among which mention must be made of some which are by a process that appears to combine the advantages of photography with the softness of mezzotint engraving.

Mr. MURRAY begins with a consideration of the relation between realism and idealism in art—a subject which has given rise to a great deal of speculation, and is likely to remain unsettled while the world lasts. Every artist, whether painter or sculptor, has an ideal of his own which influences his representations even when he is copying inanimate forms. Suppose, for example, that Sir FREDERICK LEIGHTON, Mr. MILLAIS, Mr. MARKS, and Sir JOHN GILBERT were to make copies of one of RAPHAEL'S "Cartoons," in each artist's copy something would be found to indicate the authorship. Drawings of a living model would be no less suggestive of the particular artist's idiosyncrasy. In other words, it may be said that an object does not appear to two artists in the same way. The most realistic painter and sculptor, let him strive ever so hard, could never produce a work that will have the realism of a photograph. Something belonging to the artist himself must be imparted to the work, and this being so, it may be said that all artists are idealists, the only difference between them being the extent or quality of the idealism. How far the works of the great Greek sculptors corresponded with the bodies of the contemporary men and women we can never determine. Anyone who has observed the nude forms of modern athletes will be ready to admit that manly beauty does exist in the nineteenth century, although the exercises have a tendency to develop one part of the frame to excess. But in Greece there were more opportunities of the whole body being exerted, with the result of having less disproportion between the parts. A statue which to modern eyes appears an idealisation, may, therefore, be as accurate a copy of a living form as the artist could produce. A true artist will always find it difficult to define the limits of the real and ideal, but a theoretical philosopher who has only to deal with words can, with a stroke of the pen, place them in opposition. Mr. MURRAY has taken some pains to bring together many speculations concerning an artist's work by Greeks, Germans, and Frenchmen. But, however curious they may be, they do not enable us to understand PHEIDIAS any better. There is a nearer approach to that end in what Mr. MURRAY has drawn from his own observation of the statues and vases. Two points may be noted. One is the influence which was exercised on the sculptor's mind by the existence of accepted types for divinities and heroes, and approved ways of treating subjects. "A comparison of the early Greek vases," we are told, "will show with what constancy the main elements of composition were adhered to and respected as if they were artistic formulæ established for all time." A second influence was connected with the materials employed. It is an everyday experience that a fine block of marble, a new kind of canvas, improved paints or brushes are inspiring, and tempt men to surpass themselves. When, therefore, an abundance of ivory and gold was available for the use of PHEIDIAS, is it not reasonable to conclude that the materials suggested new possibilities in art? If, as ARISTOTLE held, a block of marble contained a statue which it was the office of the sculptor to set free, would not ivory and gold appear to be destined to give form to something that was too noble to be imprisoned in stone? "Their splendour might," says Mr. MURRAY, "if subservient to an ideal developed amidst the possibilities of marble or bronze, add little beyond subtle charms of softness and colour. But when this splendour and its possibilities enter into the formation of the ideal, it could scarcely be but that the imagination would derive from them a powerful guidance in its endeavours to people the unseen and unknown with beings of the loftiest type." The world has long since lost all trace of the cryselephantine works of PHEIDIAS, and the descriptions of them are too vague to be realised. We are, therefore, unable to imagine why gold and ivory

were best fitted to give expression to the sculptor's genius; but, since that was the case, it may be concluded that, however sublime may be the Parthenon frieze, we do not see PHEIDIAS at his best in the figures, and as he was known to the Greeks.

Before the description of the Parthenon sculpture is undertaken, Mr. MURRAY considers the question whether the older temple was not adorned with representations of similar subjects. A bas-relief has been found on which is seen a charioteer stepping into a chariot, and the slab has been said to form part of the building which was destroyed by XERXES. The evidence is slight enough; but if the conservatism of Greek artists is remembered, it is not unreasonable to assume, even if there were no slab, that there was a procession carved on the frieze of the older temple. The great frieze of PHEIDIAS becomes a puzzle if we regard it simply as something designed by him; but if considered as a new setting of a renowned scene, which had become sacred from its associations, the case is altered. It may be also mentioned that there was no novelty to an Athenian in the subjects which were illustrated on the pediments of the Parthenon. They had been treated before, and were to be seen elsewhere on the Acropolis.

One of the most striking peculiarities of the Panathenaic frieze is the dualism of the procession. The figures are not identical; but there are two sets of men, maidens, victims, youths, musicians, chariots, and horsemen. Then there are several gods and goddesses who are mingled with the Athenians, but who are supposed to be in Elysium, from whence they observe the procession. The invisibility of the deities has been made the subject of an article in *The Architect* by Mr. MURRAY. With regard to the dualism he writes:—

Take from the east frieze its central assembly of seated deities, and there remain on each side groups closely responding to each other of men and maidens. Then compare the whole of the south frieze with the north, and the various elements of each will be found to respond similarly. Or better, let us imagine the marble blocks on which these two friezes are sculptured to be placed back to back in their natural order, and it will be at once evident that they thus constitute the two sides of a procession, as seen at the same moment from two sides of the road. To annihilate in imagination the whole breadth of the Parthenon, which in reality separated these two friezes, and to have been able after seeing both separately to combine them in this manner, would hardly have presented a difficulty to Greeks of the time of Pheidias, familiar more or less with works of archaic art, in which the natural desire to have both sides of a thing pictorially represented, had gradually led to a fixed conventionalism in composition. On the earliest painted vases where animals occur, it sometimes happens that when a lion, for example, is represented, both sides of him are drawn. The result has the appearance as if it were two lions, standing confronted, but with only one head between them. Apparently the next stage was to represent two lions, both strictly in profile, standing closely confronted, when the intention was only to figure both sides of one lion. The two lions, as they appear to be, above the gateway of Mycenæ, are an instance of this.

In the treatment of the metopes it is also evident that the influence of archaicism is again exhibited, and sometimes it would seem to be in conflict with the sculptor's spirit. The action—that is, the subject—is not always simple and complete; the type of the heroes is different from that adopted in the frieze, and the masterly skill often displayed in the drapery contrasts with the hardness which marks it elsewhere. The sculptor was not always able to obey the promptings of his ability; he had to succumb to conventionalism; and, therefore, to judge the Parthenon marbles as if they were the works of modern sculptors would be to obtain a false notion of their principle. It was in this way that some critics were led astray at the time when the purchase of the Elgin collection was under discussion. They examined the marbles as if they had been sent in for exhibition at Somerset House. In 1816 there was no recognition of any traditional code having prevailed in Greece, and in consequence much of the interest which surrounds the sculpture was ignored. One of the advantages of Mr. MURRAY'S history is that the figures are considered, not only as being the product of the genius of a great sculptor, but of a power outside him, which PHEIDIAS was compelled to respect.

It is mainly in the choice of the subjects, and for their arrangement, that the pediments suggest an external influence. In the treatment of the figures the sculptor was apparently free. The increase in the admiration of the remains of the pediments testifies to the growth of knowledge of art as well as of good taste in this country. FLAXMAN, it will be remem-

\* *A History of Greek Sculpture under Pheidias and his Successors.* By A. S. Murray. Vol. II. John Murray.



bered, ranked the *Theseus* far below the *Apollo Belvedere*, and on the beautiful draped figures of goddesses he set little value. PHEIDIAS he considered was a rather good man to make a bas-relief, but was totally incompetent to undertake large statues. As this may appear to be an exaggeration, we give the sculptor's own words:—

Pheidias having had the advantage of studying painting, first gave a great freedom to his designs; that freedom he was able to execute, or to have executed, with great ease in small and flat works. But as the proportions of the particular drawings of the figures were not so well understood generally as they were a few years afterwards, there are some disproportions and inaccuracies in the larger figures—the necessary consequences of executing great works when the principles of an art are not well established.

This was the belief of the first sculptor in England, but, happily, no artist of any standing would now agree with FLAXMAN. More judgment was shown by BENJAMIN WEST, and he anticipated modern opinion when he said “the *Apollo of the Belvedere*, the *Torso*, and the *Laocoon* are systematic art; the *Theseus* and the *Ilissus* stand supreme in art.” The repose of the figures was without a precedent in Greek art, and PHEIDIAS here demonstrated that it was possible to make a god appear in a form worthy of a god. But it is remarkable that although so many figures remain, all attempts to produce restoration of the pediments have been failures. The drawings of the sculpture before removal are not satisfactory, and the ancient vases which represent similar subjects suggest arrangements which do not correspond with the figures. One cause of the disappointment is suggested by Mr. MURRAY when he says that there was no formal unity in the composition. “Every figure is independent bodily; it is only in sympathy that they are united into composition.” But, according to modern notions, independence in a sculptural competition is as great an evil as it is in party politics; it becomes a *dérèglement* which quickly ends in chaos.

In writing histories the first aim of the historian should be the discovery of the motive powers of which events are the consequence. This aim has been recognised by Mr. MURRAY. His book is not a descriptive catalogue of all the remains of ancient sculpture which have survived, but it is of more importance, for it suggests how those works obtained the qualities which characterise them. An impetus was given to sculpture by the appearance of PHEIDIAS; it was extended by his pupils, and has not yet ceased to be operative. In like manner PRAXITELES, SKOPAS, MYRON, and POLYKLEITOS were powers; and when the works of all those artists are understood there is little to be done, except to trace the proportion in which their influence was felt by succeeding sculptors. In Mr. MURRAY'S book we find everything concerning the works of the great artists that is worth knowing, and this is a more profitable arrangement for the public than to have space wasted on works which are copies of copies, and on others which are more or less commonplace. Mr. MURRAY helps us to comprehend the growth and decline of ancient sculpture, to recognise the qualities which impart style to masterpieces, and to discriminate between a work of genius and one of mere skill. All this was not easy to accomplish, and it would be absurd to suppose that the result should be a sparkling essay, which can be read through in an hour. There are already agreeable compilations of that class. The new “History of Greek Sculpture” is addressed to students who are in search of something better than amusement, and who are willing to pay attention to a man who is master of his subject.

#### PARIS NOTES.

THE excavations that have been lately in operation on the site of the Tuileries for the removal of the foundation-stones of the palace are now nearly finished, and have not been attended with the discovery of the anticipated treasure, valuable documents, or artistic relics. The immense cavity is being filled in, and in a week or two the last vestiges of the old palace will have disappeared, and its site levelled with that of the Rue des Pyramides alongside.

It is stated that the Société des Artistes Français are seriously considering the practicability of utilising the ruins of the Conseil d'Etat and Cour des Comptes, on the Quai d'Orsay, for the construction of a great Palais des Beaux-Arts. Two architects have been charged to make a careful inspection of the ruins, and report

to the society as to the possibility of adapting them for the purpose.

The Committee of Historic Monuments have taken up the question of the Papal Palace at Avignon, which, in addition to the architectural interest it possesses, contains, moreover, many old frescoes now in imminent danger of destruction. The building is at present used as a barrack. A petition was presented to the Government nearly two years ago for the removal of the troops, but without effect; now, however, that the powerful body above referred to is interesting itself in the matter some satisfactory result may be expected.

The Union Centrale des Arts Décoratifs have just published the programme for 1884 of its special classes for instruction in stone, wood, earth, and glass-working. There will be thirty competitions of various kinds, divided into two categories, one comprising sketches and models, the other, designed especially for industrial students, containing only fully-executed works. The prizes consist of large gold and bronze medals, bearing the words “Grand Prix de l'Union Centrale.” Competitors must send in their works between September 25 and October 1 inclusive; the jury will fulfil their duties from October 1 to October 5; and the public exhibition will open immediately afterwards.

The great Route d'Epinay is at last completed, and open for traffic. This superb thoroughfare, which was commenced during the administration of M. Haussmann, runs from the Place du Château d'Eau, under the successive names of the Boulevard Magenta, Boulevard Barbès, and Boulevard Ornano, to the Clignancourt Gate, crosses the Commune of Saint-Ouen, strikes the Seine, along which it continues, forming a splendid quay right through the town of Saint-Denis and the pretty village of La Briche, and finally joins the high road from Paris to Pontoise at Epinay. Throughout the whole distance of ten kilomètres (nearly 6½ miles) the new road keeps the appearance of a Paris boulevard, alike in width, arrangement, and bordering of trees.

The Paris authorities have utilised the iron sheds, formerly erected on the Place de la République for the flower market, as shelters for pedestrians in case of a rain-storm or sudden shower; two in the Champs Elysées and two in the Bois de Boulogne. As they now stand each of these shelters is 50 mètres long by 5 wide, and consists of a zinc roof supported upon cast-iron columns, with tar-pavement for flooring.

M. Bouguereau has proposed to the Académie des Beaux-Arts to petition the Minister of Public Instruction and Fine Arts to increase the yearly allowance of the students at the Villa Medici to the same amount as that received by the pupils of the French Art School in the same city. The matter has been referred to a special committee.

The Cercle Artistique de la Seine opened a fine exhibition of paintings on Christmas Day in its own galleries. Among the exhibitors may be mentioned MM. Feyen-Perrin, Vollon, Stevens, Ribot, Cazin, Lambert, Renoir, &c.

It is announced that the paintings in the Luxembourg Palace will shortly be removed to the Orangery, in order to leave more room for the various services of the Senate.

The designs of MM. Crauk and Croisy have been chosen for the monument to General Chanzy that is to be erected at Le Mans. The former will execute the statue itself, and the latter the pedestal, which will bear eleven figures in bas-relief representing soldiers of the Army of the Loire. Both portions of the work will be exhibited in next year's Salon.

The Chapelle Expiatoire, one of the curiosities of Paris, is threatened with destruction. It has already been disestablished as a religious edifice by the refusal of the Government to appoint a successor to the late incumbent, Abbé Combet, and now the Municipal Council has passed a vote in favour of its entire and immediate demolition. The City Commissioner of Works has consequently been instructed to communicate with the Government on the subject with a view to obtaining its consent, which, as the building is State property, is necessary before it can be touched.

The Chapelle Expiatoire, as it now stands, was commenced in 1816, from the plans of the architects Percier and Fontaine, and finished in 1826, at a total cost of more than 2,000,000 frs. Its aspect, as seen from the outside, recalls that of a temple of antiquity; the high altar stands in the centre, exactly on the spot where for twenty-two years the remains of Louis XVI. and his unhappy Queen had lain.



## THE STUDY OF ART.

THE following address was delivered by Mr. T. Gambier Parry at the annual meeting of the Gloucester School of Art:—

I fear that after having addressed the students and friends of this art school annually with very rare exceptions for the last twenty years I can find nothing new to tell, especially as the same difficulty exists as heretofore in speaking to a mixed audience who have but small interest in the specialities of art, which could be treated with pleasant freedom only before a company of students. But things have changed all round during the last quarter of a century as regards the subjects of public interest and attention, and, among them, in nothing more strikingly so than the estimate of that wide range of subjects included among the arts. There have been many causes for this change of attitude towards fine art. No doubt the facility and cheapness of travelling, the establishment of museums, and the opening of galleries, and many other causes have contributed to this change. The increase of independent wealth consequent on a long period of comparatively general peace may have been another cause, affording the means for the adornment of life that times of struggle and disturbance had kept hard and plain: but there was a cause that lay deeper than them all. The motive power of which those matters were in fact the result was the weariness of the national and individual heart for want of things beautiful—for beauty is a necessity of intelligent life. All good and great art had died out; what remained was forced, unnatural, and frivolous. All over civilised Europe there was no art for the people, and in our own country a contempt for it was a virtue bracketed with manliness. But the craving for beauty is irrepressible; it may be for a while kept still by pressing events of national or individual life—it may be poisoned by calamity, misdirected by vice, chilled by oppression, and dormant for the very want of all healthy food; but the hunger for it is a part of our nature, and is irrepressible, because of the conscious or unconscious conviction in the very depth of all hearts that life and beauty are inseparable. We cling to life, and we yearn for beauty, which is life's symbol. We regard life as our enduring inheritance, and with it therefore beauty is itself immortal. Well may we therefore hunger for it, which is the type of the highest qualities of our nature, the sign which directs the way of the loftiest aspirations of intellect or religion, and the pressing and unfailing evidence of the divinity of life.

It is not everyone who can or cares to realise the depths from which the spirit of fine art springs. Rough times and rude necessities had pressed that spirit down in England, but could not crush it out. It awoke, and our people recognised it. It forced on their attention the common mistake that classed rudeness with honesty, and regarded refinement of taste and cultivation of the poetry of life as incompatible with manly character. Neighbouring nations awoke before us, and forced our awakening into action. Men blunder when they first awake; the light is dim; or, if otherwise, the eyes are dazzled, and so were ours when the arts of other nations were pressed upon us. The faculties we needed to compete with them were dormant. Men there were who had never slept, but they were few; their examples were misunderstood; and their voices were not heeded. But our people awoke—their convictions were stirred, their respect was gained; but who were to be the guides of their first blundering steps, and where was to be found the means of training them, or the knowledge and judgment to make them strong? The arts were looked at with half-blind eyes. They were, as it were, superimposed on our national life, so things of art were confounded with things artificial; and as such they were treated with utter misconception. Art was without purpose, vague and unintelligent. The notion of ornament was as of something foreign to be applied and added to things. The idea of abstract or inherent beauty had not dawned upon our people; and much less so the idea of beauty's use. Use was associated with material, and any beauty in it was regarded as an accident. Intellectual use of beauty and the power and use of beauty's service to heart and life was not realised. Nor can it be so without training or the intuitive gifts of genius. The full conception of fine art cannot be immediately grasped in its full sense as the application of intellectual power to realise beauty. It is the function of genius aroused by the emotions of heart and mind that grasps the conception of beauty's excellence; and then it becomes the function of fine art to present it with all its spiritual force realised in material to the sight and hearts of other men. Such is the highest purpose of fine art, and when realised it is its greatest work.

But art is as wide and various as life, and ministers to it under countless characters. We are interested here in our art school; and if we look at our students now, and back at the many which have worked here, and notice their exceeding variety, the mechanical aptitude of some, the intellectual purpose, the higher aim, the poetical conception of others, our interest is still further aroused by the question that immediately presents itself: what is it in all this variety of aim or talent that a student should set before him, by what motive should he work, and to what purpose? The question is a large one, and one that students should ask themselves; but it is easily answered, for art is free, and as

a man's heart is so will his art be. The purpose of a student should be simply that of humble study. Practical success can only come of patient learning. Whether the student's aim be high or low, this is the truth. I have spoken of fine art in its highest and most serious aspect, but art has a thousand aspects, and when sincerely undertaken it is contemptible in none of them. Let the motive be what it may, whether for the amusement or the work of life, or even without any settled purpose, if it be only approached and pursued with sincerity, it must be, at its lowest estimate, a source of happiness, and therefore of the heart's profit. This is no slight gain; but beyond and beside it a student will learn to gauge his own powers, and if he is wise he will use this school as any other, and taking art as a department of education, as it is in truth for head, heart, and hand, he will master its technicalities, and those great rules and principles which are simply the recorded experience of the great men of other days; and then if he means to make art his life's work, let him throw himself into that line that suits him best; it cannot be forced, for, as I said before, art is free, and as a man's heart is so will his art be. There may be much variety of opinion about the system followed in these schools, but there can be no doubt about the benefit they have rendered to our people. It may be that a visitor strolling through these rooms, and noticing the occupation of the students, may walk away moodily, dissatisfied and displeased; questioning what is the worth of all these hours spent in copying forms which appear in their very nature inane, conventionalities of line and curve that are at once useless and uninteresting or worse still; plaster casts, which are but little else than travesties of natural forms, and with surfaces that quench all sense of the delicacy of life. Why not get natural forms at once? The sources of study would be infinitely richer, and the lessons learnt be infinitely more true. Yes, and so it is, and so they would be; but all such is only possible to students in special circumstances both of purpose and means, and where men of highest cultivation and attainment could be found to teach for love's sake. Where the wide sphere of a nation's art schools has to be provided for, the greater part of such speciality and resource is impossible. But beyond this, the impatient visitor has failed to see that the education of such classes as a nation most desires to draw within its art schools must begin with the barest elements of knowledge; like the child's alphabet for the future poet, first training the attention into a novel groove, and then, by the discipline of patience, teaching them to compare, to analyse, and then to understand what to the sight at first was irksome and to the hand weariness; till at last that sweet refreshment is gained which comes of the mind's first awakening to the sense of beauty. There is the secret spring of the artist's life; and the student, once awake to this, goes on his way rejoicing.

But the visitor still urges, "Why not learn all this from Nature; why not engage masters who can teach its beauty as well as analyse its forms?" Simply because with rarest exception neither the materials nor the men are available to answer to the call of such a multitude of schools and diversity of students. The masters themselves of such schools require a special education; for the elements of very many subjects have to be taught, and these schools are the only places for teaching them. The style of models also, from which the great majority of students work, could not be profitably replaced by natural objects; for the pupils are not commonly intuitive geniuses, but need the simplest training of their faculties of sight and observation. The comparative rudeness of their plaster models affords just the possibilities for easy elementary instruction by the master, and observation by themselves; where natural objects would only confound and confuse the unprepared mind of the students by the complex undulation of form and surface which life produces.

The artistic study of Nature is, of course, the best—where only the means of it can be found—for the moral effect of it alone is invaluable, drawing out the sweetest elements of human nature, and going far to warm the heart no less than train the studying eyes and hand. But let all students bear in mind that whatever motive may impel them, whatever project they have in distant view, whatever class of art they may adopt, the first thing needful is to learn how to see, and the second what to look for. And further, if high art be their purpose, let them be assured that the prose of obedient study is the only sure ground from which to rise to the poetry they aspire to obtain. But if, beyond respect to schools and scholars, we look for one moment on the broad subject of fine art, and consider its action, its influence, and the duty it has performed in the world, we find it to have been and to be a great and beneficent minister to the needs and happiness of human life. As the estimate and direction of that life may be, so is the character of art's ministry to it; as a thing of prose to record the facts and forms of things with precision and without comment, or a thing of poetry to brighten men's lives, arousing sympathy and communicating thought.

Fine art is of its own nature pure and sacred, for the impulses which gave it origin have come from the purest sources of emotion, which are the beauty of nature and the mystery of life. Even in times and scenes of low moral and indulgent luxury, Art has shown herself possessed of that pure and lofty spirit that all the perversion



and misuse of her by evil hands have never been able to drive away. And nowadays among ourselves she has ministered among all classes of our community, and, under countless forms, she has gained the heart of youth and age, instructing while she amused them, and elevating while she soothed them; and if, in a lower sense, men have found her value in a relief from the weariness and mechanism of society that spoils the enjoyment of natural life and mars its beauty, they have found the ministry of Art more precious still as a power to enliven and direct the divine endowment of imagination, which aids them to penetrate morally and spiritually beneath the surface of life's surroundings, and to rise to the great ideal of life's exalted destiny, and thus to find themselves possessed of an inestimable antidote and corrective to the materialising influences of modern interests, philosophy, and civilisation.

### LORD NAPIER OF MAGDALA ON CONSTRUCTION.

THE certificates awarded to the students of the Crystal Palace School of Engineering were handed to the students on Saturday last by Lord Napier of Magdala. His lordship said that the interest he had always taken in the profession of civil engineering made it very agreeable to him to accept the invitation to distribute the certificates on that occasion. He had paid one or two visits to the institution before, and that day he had visited all the workshops and drawing rooms, and it appeared to him that the course of instruction was exceedingly good, for it combined theory with practice. The colonial section, which he had visited in the summer, seemed to him very well adapted to the object in view. He congratulated those gentlemen who had now crossed the threshold of the civil engineers' profession. It was, indeed, impossible to over-estimate the importance of that profession, which was every day taking a higher position in the world. Civil engineers could point to great achievements in different quarters of the globe, especially in America; but he did not think any works there equalled—certainly they did not excel—works that had been executed in Great Britain. It had often appeared to him a question whether the profession of the civil engineer or the medical profession stood highest. The medical man saved life, relieved suffering, and investigated the state of the human frame; the civil engineer also saved life, he brought peoples together, annihilated time and space, and changed the geography of the world. The department which seemed most to require study and advancement was that of architecture. We did not in England seem to have arrived yet at the very best construction of buildings which should combine beauty with comfort and adaptability to their purpose. And that was a great point to present to the civil engineers of the day—to outdo their predecessors in all those great works to which he had alluded. He did not know any greater satisfaction than that which might be enjoyed by the civil engineer in the progress of a great work—in watching its progress and successful completion. The engineers who had to go to the colonies were pioneers. There a great deal depended upon their natural intellect and their ingenuity, because they were not like workers in a civilised country, where everything was ready to their fingers' ends, where they had to make the design and call upon the contractor to fulfil it. In the colonies they had to be their own engineers and their own contractors; they had to make everything, to invent everything, sometimes out of very little; so that they had perhaps a harder task than those who were in the higher part of the profession, though they would no doubt in time attain to that branch. It was very difficult to say to what extent the profession of the engineer might rise in England. Such wonderful works had been done that one's mind found it difficult to define what might be hereafter achieved. The design of the Forth Bridge, which he had seen, appeared to him a wonderful work, spanning 1,600 feet of the sea, and standing 300 feet above the water—a most wonderful work; yet that work, no doubt, in the course of time, would appear small compared to what might be expected from the profession. In architecture, to which he had made some allusion, we still had room for progress. Somehow or other, those nations which had not had science had jumped into the most beautiful structures, from which they might take some examples. In Europe we seemed to be tied between a few Roman and Grecian models and the works of our early architects, our Gothic architects. But the Mohammedans and the Hindoos ages ago, without textbooks, so far as we could learn, without scientific schools, and without guides or rules, had stumbled into the creation of the most beautiful structures, which those who had the good fortune to go to the East would see. It appeared as if the age of conquest in countries was the age of great buildings; so that the cathedrals and great buildings which followed the Norman conquest appeared to overshadow most of the later structures; and buildings in the East which followed the great invasion of the Mogul dynasty were the most beautiful structures. It had struck him that perhaps the construction of these grand buildings was due to the conquerors, who used the money and labour of the people whom they subjected. But now our efforts with our own money were devoted to works

of an utilitarian character. To the students now beginning their career in this admirable profession he would say that they must never cease to labour, for labour was the lot of their profession. The work of students must be characterised by the most perfect accuracy, and they must never omit any opportunity of improving themselves by observing the works of art or the actions of nature. To the practical engineer there was this consolation, that by far the greater portion of great inventions had been the work of practical men. The Forth Bridge was the development of a rude structure raised by the inhabitants of Thibet, Cashmere, and the mountains of India, and consisting of beams projecting from piers, each beam projecting beyond one that supported it, until the two sides approached sufficiently near to admit of a beam being laid across to connect them. This plan had been developed into a scientific and beautiful work by the art of the civil engineer. He wished the students every success in their career, and he trusted that the school would send forth engineers who would raise the name of their profession and the name of England for civil engineering all over the world.

### THE NEWSHAM COLLECTION.

THE collection of pictures and other works of art which the late Mr. Richard Newsham has left to the town of Preston, was, according to the *Herald*, garnered together with the judgment of a practised connoisseur, and the ungrudging purse of a gentleman of ample means. It is an open secret that the Emperor Napoleon III. in his palmiest days greatly desired to become the possessor of this magnificent art collection, which is so soon to become the property of the burgesses of Preston at large. Ten years ago the pictures alone were estimated to be worth between 60,000*l.* and 70,000*l.*, and adding to this the rest of the collection, including statuary, porcelain, and bronzes, it is plain to be seen that this latest gift to Preston will indeed prove one of a princely character. It may be interesting to state in this connection that the interior of the deceased gentleman's residence from an artistic point of view is peculiarly notable in many respects. The drawing-room and the dining-room are hung with many valuable oil paintings, but the oil collection cannot be considered nearly so fine as that of the water-colours, which grace the breakfast-room. The pictures in the latter room are especially noticeable, and the collection, which includes exactly twenty water-colour drawings by Wm. Hunt, is as choice, as far as it goes, as anything that can be found in the kingdom, the subjects being chiefly fruit and flowers. There is not a commonplace picture in the whole of the collection, which is particularly rich in Linnell senior, whose productions were always Mr. Newsham's favourites. *Antwerp Cathedral*, by D. Roberts, with whom Mr. Newsham was on friendly terms for many years, was one of his finest works. This picture was obtained by the deceased gentleman direct from the artist. Another painting is Wm. Etty's *By the Waters of Babylon*, which is unquestionably a charming work. There are also many other paintings of more than ordinary excellence from the brush of such artists as Herbert, Leslie, Creswick, Müller, Egg, MacLise, Cox, and Poole, as well as a small work or two by Frith, Holland, and Hook, in addition to a most valuable painting by Ansdell. In the breakfast room, besides the collection of Hunt's drawings, there is a sketch for the famous drawing *Chat Moss*, by David Cox, which is one of the finest sketches in existence. Several of the Hunt drawings in that room are as fine as any that artist ever produced. These are also accompanied by a magnificent drawing, *A Spanish Bolero*, which is a wonderful specimen of careful execution, by J. Lewis, and several small but exquisite drawings by David Cox. *The Guards coming up Whitehall*, by the latter artist, with the sun shining upon them, is one of the finest works of sunshine and shade playing upon the horses, men, and buildings that art can produce. The Müller pictures are very fine. Many years ago Mr. Newsham sold one of this collection; but, realising the mistake, it became his endeavour to regain possession of it, at the instigation of an old and intimate friend. The picture was finally obtained, and now adorns the walls of the room with which lasting memories of its original owner are associated. Interesting reminiscences hang round many of the pictures—of the way in which they were obtained, or incidents revealing the struggles of the artists who painted them. One of the pictures by Poole has a special interest attaching to it. An intimate friend of the artist was one night taking supper with him and his wife, when allusion was made to a picture in the possession of Mr. Newsham. Poole's friend referred to it as being one of the finest works, especially as to foreground, ever painted. The artist then said: "I painted that when I was a young man. It hung in my room for I don't know how many years, and I never could sell it. Eventually a gentleman invited me to Cambridge to paint a portrait. On going, I took the picture now in the possession of Mr. Newsham with me to try to sell it, and I found a purchaser for 3*l.* and a second-hand top-coat." The same picture now would sell for hundreds of pounds. This is but one of many of the incidents which might be recorded.



## NOTES AND COMMENTS.

MR. LACY W. RIDGE, the popular major of the popular "Artists' Corps," will be well supported, we believe, in his motion at the Institute of Architects on January 7, in favour of a return to the principle of a periodical "infusion of new blood into the Council." The system of monopoly of power has had a trial of several years' duration, and it cannot be said to have given satisfaction to anyone—not even to the fortunate members of Council, who by this time must have discovered the hollowness of the dignity which they were so eager to obtain, and the awkwardness of a distinction which separates them from their equals invidiously without being even beneficial to themselves. Architects and architecture cannot afford at the present day to be handicapped by anything that impedes free movement.

THE Institute of Architects has lost, by the death on Wednesday of M. LESUEUR, a corresponding member who had been elected in 1846. By a remarkable coincidence he was also a member of the Institute of France for the same period, having been chosen as the successor of M. VANDOYER. Soon afterwards he was appointed Professor of Architecture of the Beaux-Arts. M. LESUEUR was born in 1794, at Clairefontaine, near Rambouillet, in the department of Seine et Oise. He entered the Ecole des Beaux-Arts at seventeen years of age; took the second prize for architecture in 1811, and the grand prize in 1819. After his studies in Rome he returned to France, and was engaged to construct the parish church at Vincennes. He was also the architect of the Conservatory of Music at Geneva, and of a number of private buildings. M. LESUEUR was the author of several works, among them being his "Histoire et Théorie de l'Architecture," and his "Chronologie des Rois d'Egypte."

THE sending of Christmas cards having become almost universal, it may not be remembered that the origin of the custom was as recent as 1862. In that year Mr. JOHN LEIGHTON made two designs for small cards of the size of an ordinary gentleman's address card, with the inscription "A Merry Christmas and a Happy New Year." They were produced by Messrs. GOODALL & SON. The next step was the introduction of robins, holly branches, and landscapes. In 1868 the same firm produced cards with Little Red Riding-hood, &c. Messrs. MARCUS WARD & Co., of Belfast, were, however, the first publishers of cards on an extensive scale, and by the employment of clever artists they obtained capital designs and a great variety of subjects. They were followed by Messrs. DE LA RUE, EYRE & SPOTTISWOODE, and other firms. But while the majority of the cards may be designed in England, many publishers now have the printing executed abroad. This is not due to economy alone, but to the difficulty of insuring successful colour-printing in England.

How to house the poor is becoming a more serious question in Paris than in London. That class of inhabitants is daily increasing. In 1875 there were 9,297 lodging-houses, containing 113,987 French and 18,656 foreign lodgers. In 1883 there were 11,753 houses, with 196,229 French and 43,935 foreign tenants. This increase is the more remarkable if compared with that of the general population, which in the same period rose from 2,000,000 to 2,300,000—that is, 15 per cent.; while with the lodgers it was 80 per cent. One of the consequences of overcrowding is that the death-rate due to typhoid fever has been doubled. It is difficult to find a remedy in such a city as Paris, although over six hundred schemes have been sent to the Municipal Council. One scheme would, to carry out, cost twice the amount of the war indemnity paid to Germany. In the first place, it seems to be necessary to enlarge the area of Paris in order to obtain land, and for this purpose the belt of fortifications erected by M. THIERS will have to be removed. As regards the raising of funds, there is no want of money in France, and if security can be given it will be forthcoming for the erection of houses. But what capitalist will accept the bond of a proletariat?

MR. G. G. SCOTT, who was associated with his father in the erection of the new spire of Chichester Cathedral, gives some explanation of the failure of the lightning conductor. After sixteen years' use the conductor required renewal, but as Mr. SCOTT's responsibility ceased with the completion of the spire,

"the duty of replacing the conducting appliances by others of more modern kind rested with the professional advisers of the Chapter." Mr. SCOTT takes the opportunity of pointing out that "scientific persons are somewhat in the habit of throwing contempt upon those stupid people who have carried out in practical work the opinions which the scientists held the day before yesterday, but which they have since abandoned."

THE Leicester Corporation are promoting a Bill in the next session of Parliament for the levying of a borough rate of 2d. in the pound for the purpose of maintaining the free library, the town museum, and the establishment and maintenance of an art gallery. This rate will produce about 3,500*l.* per annum, which, it is believed, will amply provide for the maintenance of the three institutions. Already a considerable number of valuable pictures have been presented to the art gallery, and the town museum is undergoing a complete reconstruction and rearrangement. The antiquities, for which Leicester is famed, have been placed in a special room; while the Roman columns and the milestone of Hadrian's reign, marking the Roman occupation of Leicester by the Romans, with some handsome tessellated pavements, have been placed in a lantern-roofed annex. In the great zoological room, which is 80 feet long, 40 feet broad, and 25 feet high, a striking feature has been introduced in the pictorial representation of the fauna, with a view to showing their habits and their natural surroundings.

ACCORDING to M. CLERMONT GANNEAU, only seven inscriptions are known in Palestine of a date anterior to the destruction of Jerusalem by TITUS. The first is the famous Moabite stone. Four were found in Jerusalem, and they present the peculiarity of being engraved in a cartouch or hollow framing on the rock. Two are much mutilated. The third is a narrative of the excavation by Israelitish engineers of a tunnel 500 mètres long under Mount Moriah. The fourth indicates a small monolith naós of Egyptian style, which is an authentic specimen of native architecture. The next is an inscription marking the boundary of Gezer. The seventh is a stela, which was discovered in 1871 in the foundations of an old Arab edifice close to the Mosque of Omar, and contains the text of the famous law forbidding, under pain of death, to the Gentiles the entrance of the sacred precincts of the Temple, reconstructed by HEROD. It is by virtue of this law, invoked by the enraged Jews, that the Apostle PAUL, after having with great difficulty escaped tumultuary execution, was dragged before the Roman tribunal.

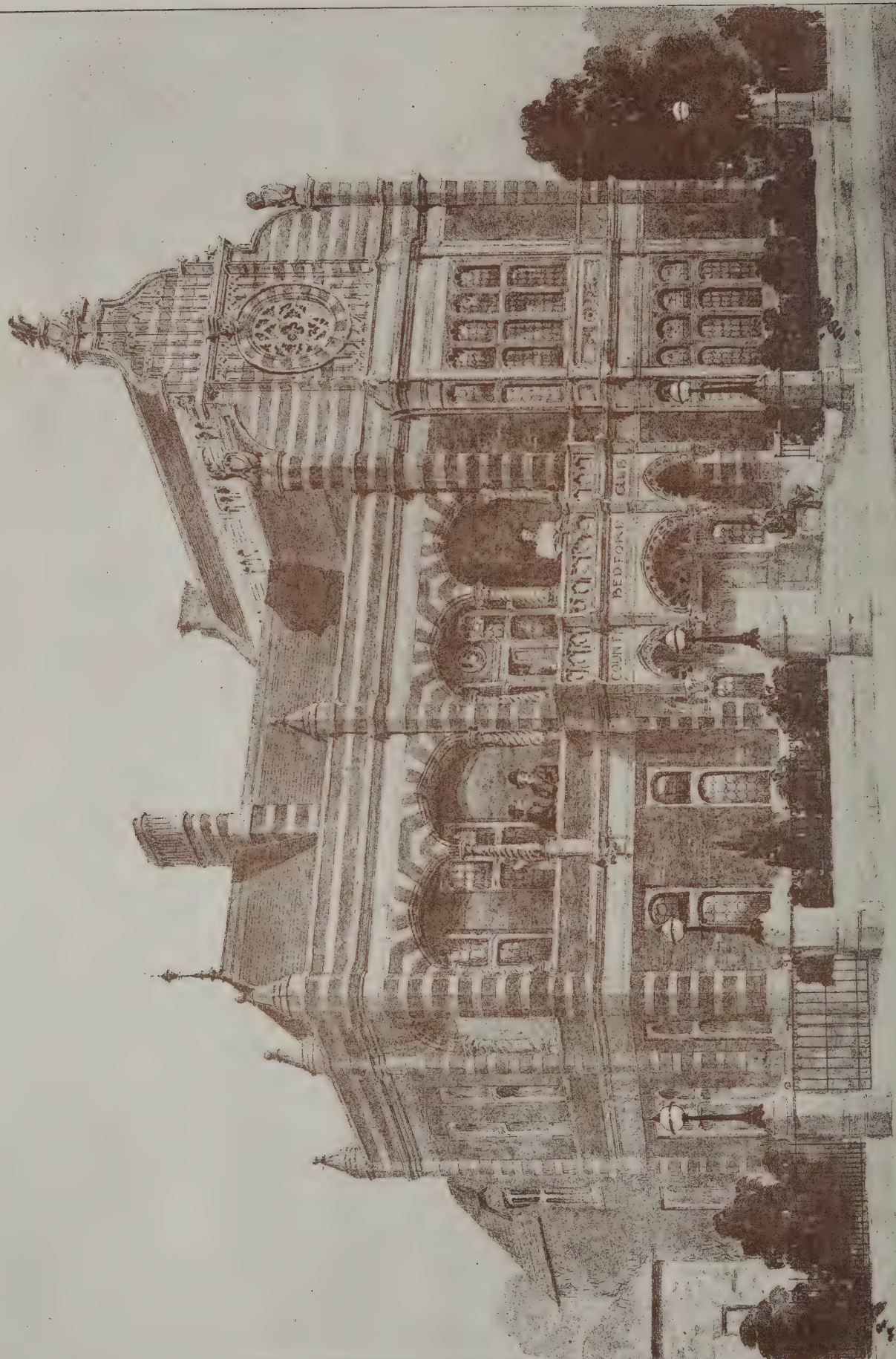
A PARLIAMENTARY Committee are likely to be engaged in considering the merits of rival schemes of communication between both sides of the Thames below London Bridge. The Metropolitan Board proposed a tunnel to cross the Thames from Nightingale Lane to Dockhead, a steam ferry at Woolwich, and one at Greenwich. The Corporation of the City proposed to establish free ferries, and to apply the income of the Bridge House estates to that purpose; the undertaking of the Thames Steam Ferry Company (Limited), and the widening and improvement of Tower Hill are included. A company will seek for authority to make opening bridges at the Tower, at Stepney, and at Greenwich. A subway in the bed or foreshore of the Thames is proposed in connection with each bridge. Another company will propose the construction of a navigable channel from Blackwall across the Isle of Dogs to Limehouse, the establishment of three steam ferries across the Thames, and a free steam ferry across the new channel. It is also proposed to construct a subway under the Thames, commencing in the vicinity of Newington Butts and terminating in King William Street, in the City.

ARCHITECTS have no reason to complain of a scarcity of diaries this year. There are the elegant little books of Messrs. DE LA RUE, some of which seem almost too dainty for everyday use. Of an opposite character are the cheap diaries of Messrs. SMITH. Messrs. LETTS & Co. depend for patronage not only on the character of the blank pages, but on the quantity of information relating to most departments of commerce. Messrs. HUDSON & KEARNS continue to be supreme in the production of diaries and account-books for architects and builders. This year paper and printing seem to be better, the binding is of an enduring kind, and the whole appearance of a copy has something substantial about it. The firm well deserves encouragement.







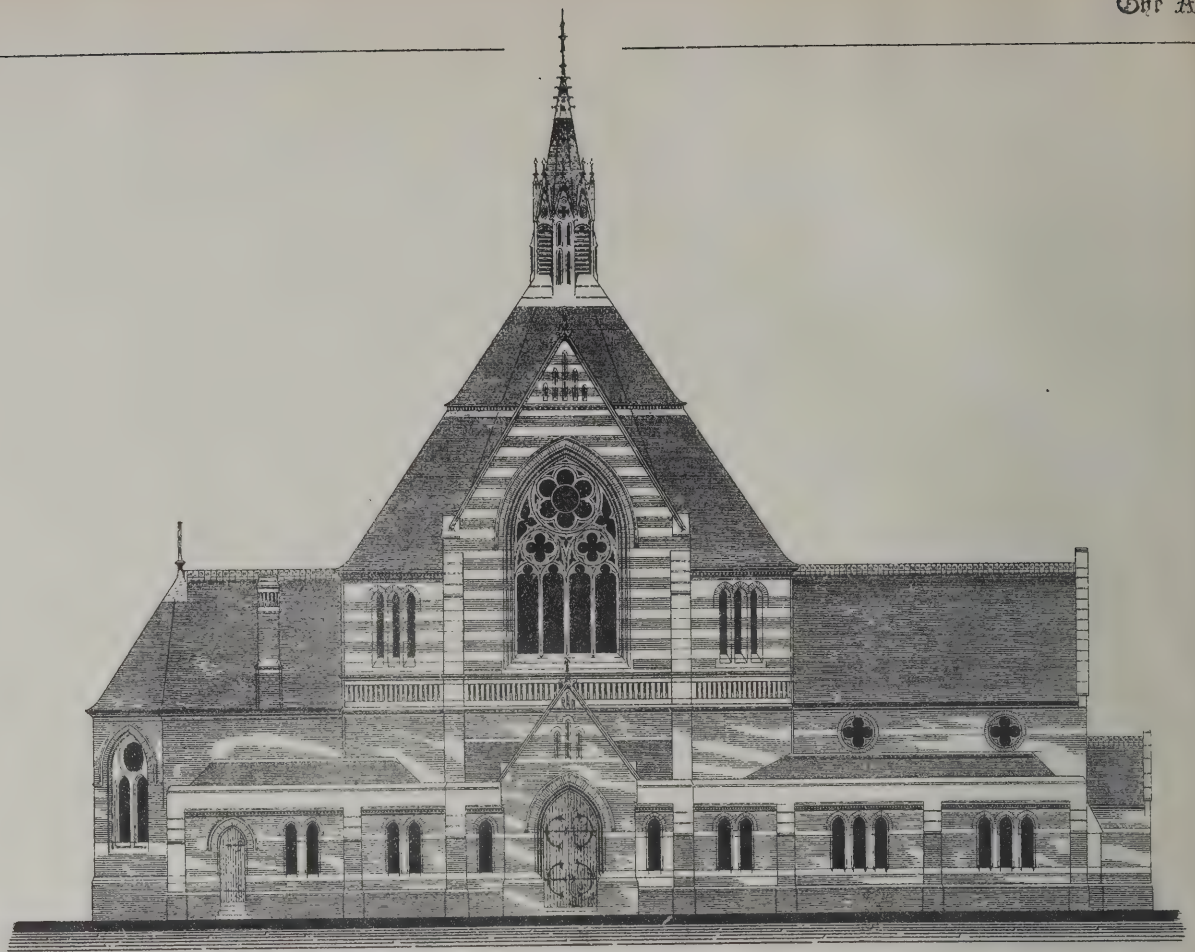


DESIGN FOR THE COUNTY BEDFORD CLUB.



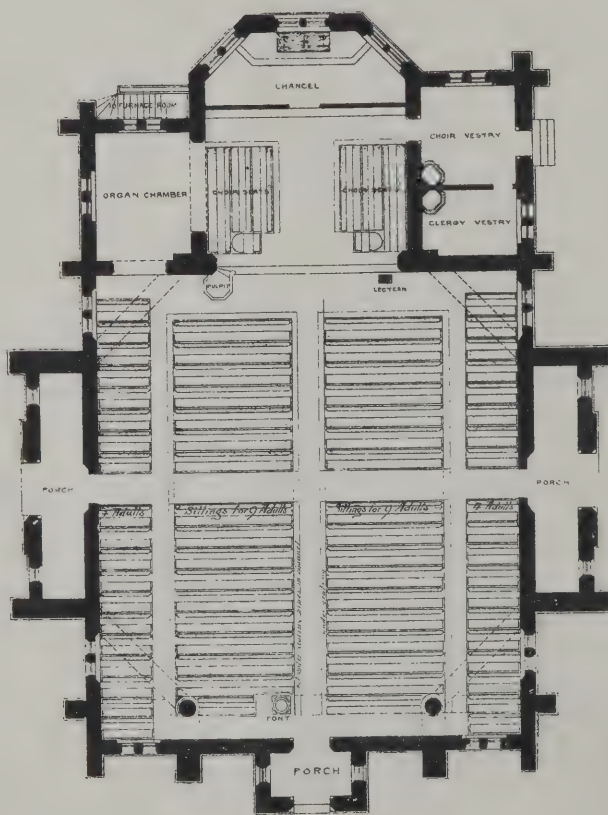






SIDE ELEVATION: SHOWING BUILDING COMPLETE.

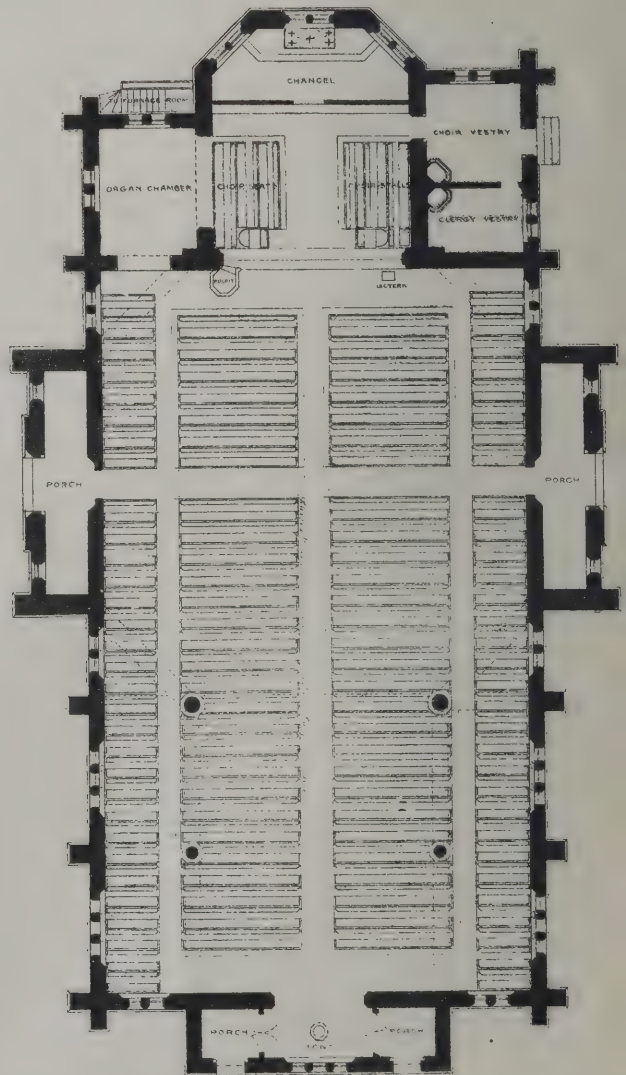
Scale 0 10 20 30 40 Feet



Plan of Church as first erected to seat 500 Adults

Note: Each sitting has an entirely uninterrupted view.  
Furnace Chamber is placed under Organ Chamber

Scale 0 10 20 30 40 Feet

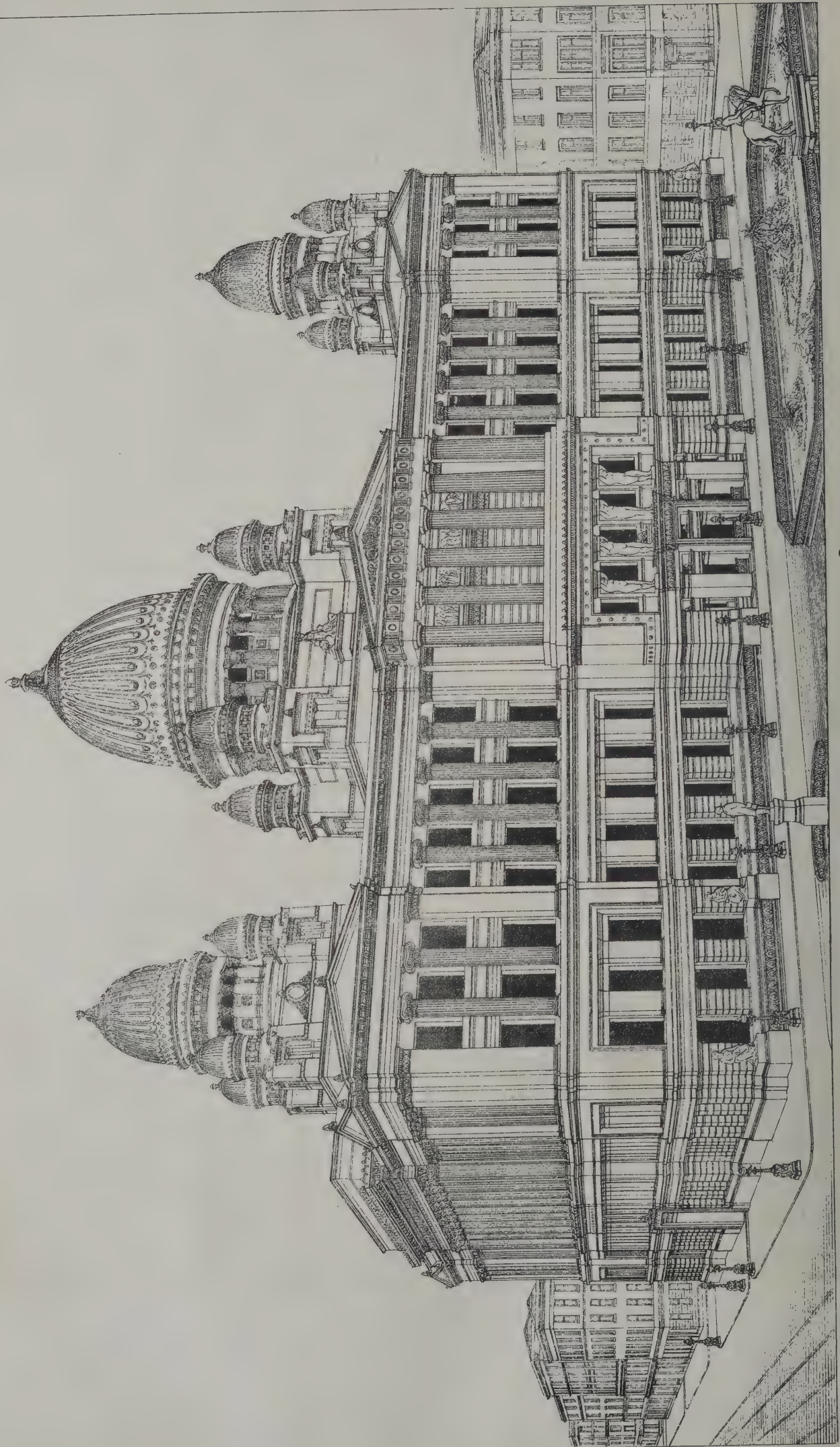


Plan of Church as complete to seat 800 Adults







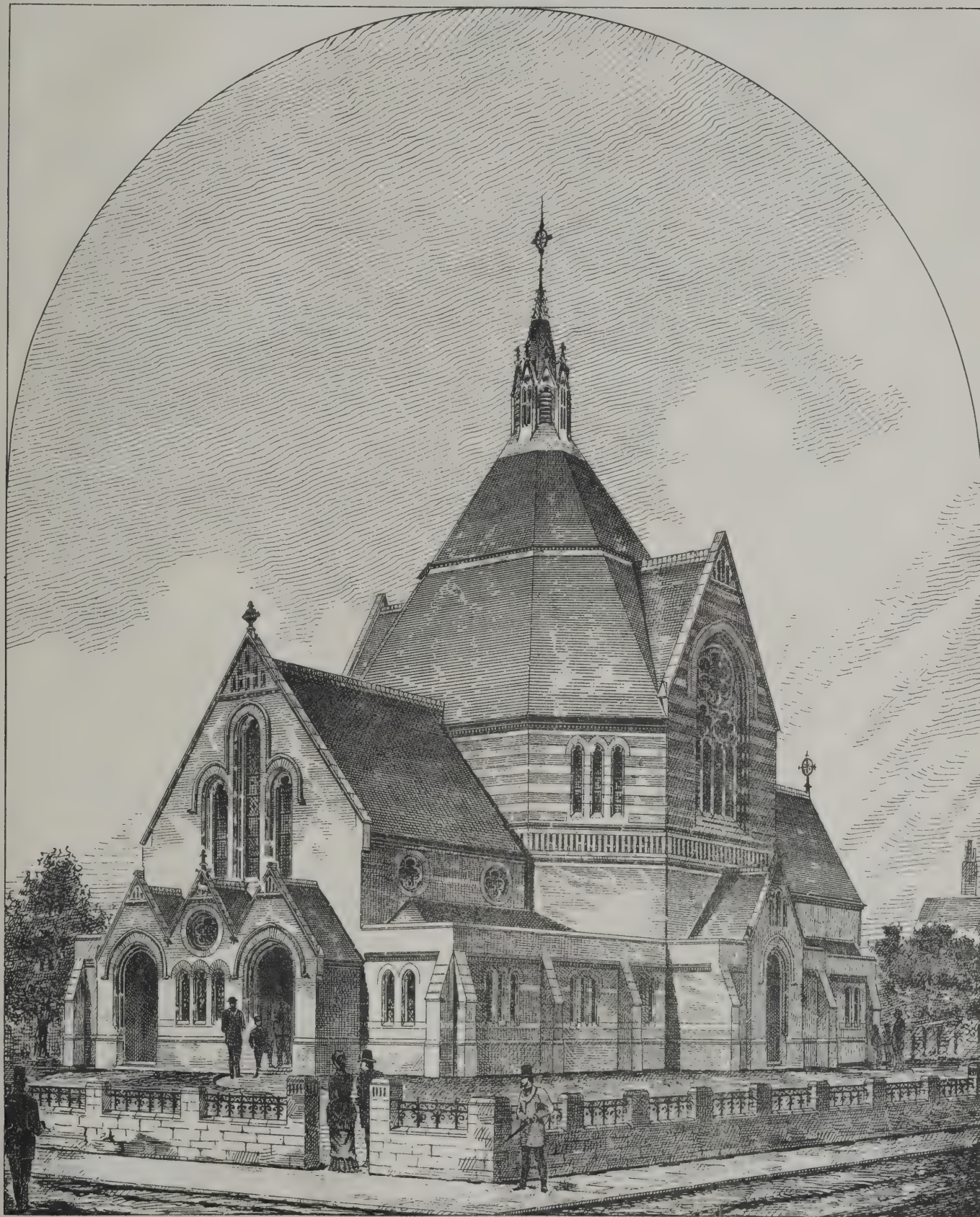


DESIGN FOR MUNICIPAL BUILDINGS, GLASGOW.

By ALEXR SKIRVING, ARCHITECT.



The Architect. Dec<sup>r</sup> 29<sup>th</sup> 1883.



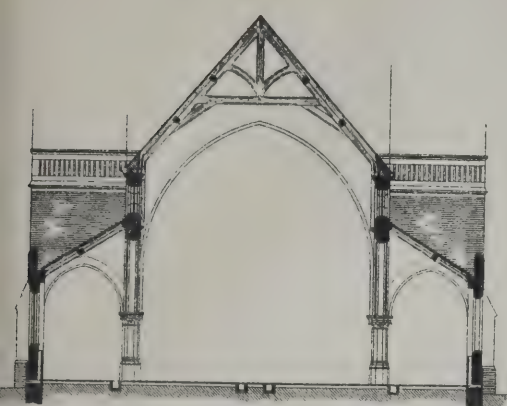
DESIGN FOR ALL SAINTS CHURCH, IPSWICH.

By MARK J. LANSDELL. A.R.I.B.A.

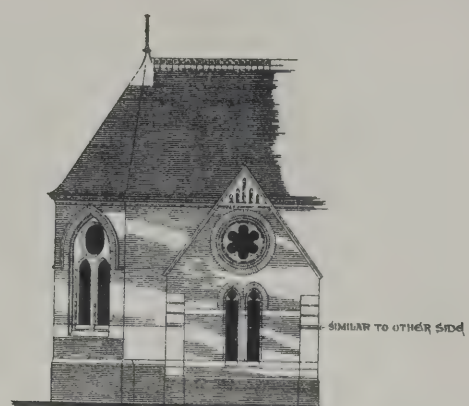








TRANSVERSE SECTION thro NAVE



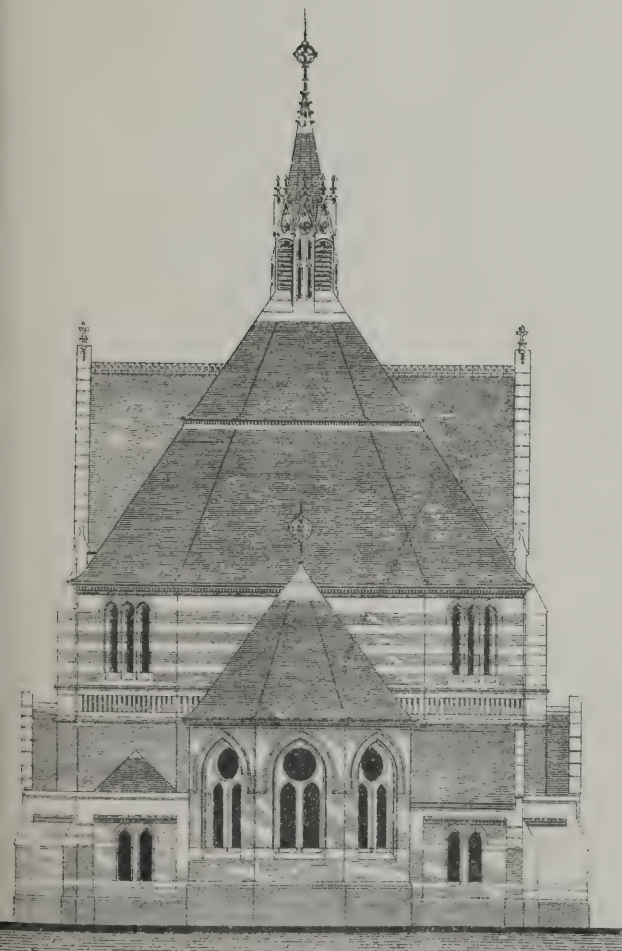
ELEVATION OF NORTH SIDE SHOWING ORGAN CHAMBER.

SIMILAR TO OTHER SIDE



LONGITUDINAL SECTION.

0 10 20 30 40 50 60 70 80 90 100 feet



EAST ELEVATION.



WEST ELEVATION.









A CHIMNEY, HAMPTON COURT.

By HUON A. MATEAR







## ILLUSTRATIONS.

## DESIGN FOR PROPOSED MUNICIPAL BUILDINGS, GLASGOW.

**A**LTHOUGH unsuccessful in the competition, Mr. SKIRVING's design was one of the most characteristic submitted. It is based on the Greek style of architecture. Simplicity, breadth of treatment, and the avoidance of all littleness in parts were aimed at, while expression was given to the chief departments to show their designation in the arrangement of the orders. Thus, for example, the council-chamber is marked out and made an important feature by a Doric portico; the Ionic, from its elegance, is used for the municipal offices; and the festive character of the banqueting-hall by the Corinthian. Phonetic meaning would be further obtained by the addition of sculpture representing *Council, Law, Arts, &c.* The plan is symmetrical and well balanced; the external arrangement is planned to give architectural grandeur. The entrance vestibule hall, with its columns and grand staircase, are a series of combinations, surmounted by the domical roof, affording scope for the highest artistic treatment.

## DESIGN FOR ALL SAINTS CHURCH, IPSWICH.

**A**SINGLE and a double-page illustration of "Proposed Church of All Saints, Ipswich," represent the design submitted to the committee by Mr. MARK J. LANSDELL, A.R.I.B.A. As will be seen on reference to the sheet of geometrical drawings, an attempt has been made to grapple with the requirements set forth by the church committee, which have been given in previous numbers, other than in the ordinary nave and aisle plan. The plan has been arranged with a view to minimise the obstructions to view usually offered to worshippers by columns and the like, and the ingress and egress has received most careful consideration. The general handling of the design shows considerable originality, and considering the low cost of only 7 $\frac{1}{2}$  per sitting, a great effect of dignity, desirable in all town churches, has, as a reference to the perspective view will show, been obtained.

Out of about seventy-five sets of designs submitted by different architects to the committee, this was one of the few chosen by Mr. EWAN CHRISTIAN and retained by him, from which to make the final selection.

## COMPETITIVE DESIGN FOR THE BEDFORD TOWN AND COUNTY CLUB.

**T**HE accompanying illustration represents the design submitted in a limited competition by its conjoint authors, Messrs. A. HESSELL TILTMAN, M.R.I.B.A., 7 John Street, Bedford Row, and FREDERICK GOSLING, of Hampstead. The premises were designed to accommodate from 150 to 200 members, and consist on the ground floor of vestibule, with porter's box, large hall, ladies' room, reading-room, writing-room. Coffee and dining-room closely adjoining servery, kitchen, &c. Very complete lavatory and dressing arrangements are provided. On the first floor is a large smoking-room communicating with a large verandah. Billiard-room for two tables, card-rooms, and apartments for the caretaker. The material proposed to be used was red brick and LASCHELLES' concrete, the roof to be covered with green slates. The estimated cost was 3,280 $\frac{1}{2}$ ., exclusive of furniture and fittings.

## CHIMNEY, HAMPTON COURT.

**T**HIS illustration of one of the picturesque "bits" of Hampton Court has been reproduced from a drawing by Mr. H. M. MATEAR, of Liverpool, which was exhibited this year at the Royal Academy.

**The Produce Exchange Building**, now being erected in New York, will be of colossal dimensions. The foundation is built upon 15,034 piles; there are 109,796 feet of yellow pine capping timber, 17,530 square feet of base stone, and 64,732 square feet of building stone. The building fronts 307 feet on Broadway and Whitehall Street, 159 feet on Stone Street, 150 feet on Beaver Street, and 300 feet on New Street. The tower at the south-east corner of the building is 48 feet square; the height of main building from side-walk to base of tower, 120 feet; height from side-walk to top of tower, 225 feet; and height from side-walk to top of flagpole, 306 feet. The size of the main room of the building is 220 feet by 145 feet, and the height 47 $\frac{1}{2}$  feet. The number of square feet of foundation of the main building is 44,754, of the tower 2,725 feet, and terrace 4,128 feet, making a total of 51,607 square feet. The building and land will have cost 3,000,000 dols. when completed.

## EDINBURGH ARCHITECTURAL ASSOCIATION.

**A** MEETING of the Association was held on the 20th inst. Mr. D. McGibbon, president, occupied the chair. Mr. E. Calvert, architect, read a paper entitled "Technical Training in the Collateral Trades a great Factor to Success." He remarked that many youths are apprenticed to the architectural profession through mistaken ideas on the part of their parents, who imagined that their sons were adapted for architects because they had shown a "taste for drawing," forgetting that more than mere drawing was required. He also referred to the large number of youths who completed their apprenticeship without having acquired a thorough knowledge of construction—being, in fact, little better than copying machines. Had they received some training in the collateral trades they might have developed into useful practical men, instead of swelling the ranks of an overstocked class in the profession. It was to be regretted that no technical schools existed in this country where students of architecture could be initiated in the technique of those trades so inseparably connected with the profession. The lecturer concluded by advising those who desired to gain this practical knowledge to work side by side with mechanics—a course which had been again and again adopted by some of the most distinguished architects, who had considered no post too humble or probation too severe.

## GLASGOW ARCHITECTURAL ASSOCIATION.

**A** LECTURE was delivered last week by Mr. Robert Scott, upon "Building Contracts." The president, Mr. P. M. Chalmers, occupied the chair. The lecturer urged that greater attention ought to be given on the architect's part to the preparation of both plans and schedules before tenders are sought for; that not only should there be scale drawings and details, but also a clear and particular specification; while on the measurer's part every item in the schedule should be so defined that the intending contractor is not obliged to trust to an inspection of the drawings to ascertain the sizes of materials. He then considered in detail the five principal clauses which constitute a Scotch building contract, viz., workmanship and material, with architect's powers; contractor's responsibility; arbitrators; proprietor's powers of omitting or adding to work without vitiating contract. Some of the conditions to be met with are both inequitable and legally untenable. After a considerable discussion of the subject, a vote of thanks was awarded to Mr. Scott.

## LICHFIELD CATHEDRAL.

**A** LECTURE has been delivered by the Rev. Canon Lonsdale on the "Restoration of the Interior of Lichfield Cathedral." The reverend canon said it was believed that the idea of restoration originated with Canon Hutchinson, was taken up by Archdeacon Hodson, and ultimately joined in by Dean Howard, who proved a munificent contributor to the cost. The architect, as is well-known, was the late Sir Gilbert Scott. The first work actually done was the warming of the cathedral from end to end—a work which has stood the test of twenty-five years; for though, of course, boilers and pipes have had to be renewed, the plan originally proposed has been winter after winter brought into action, and has never failed. At that time the nave and transepts were nearly destitute of furniture, while the walls, arches, and pillars were one uniform, dead, yellowish whitewash, many coats thick; as was also the choir, and indeed the whole of the interior. The nave was quite unused; indeed, except during service hours, the verger's silver key alone gave admission to any part of the church; and while morning and evening prayer was going on the nurserymaids, it is said, used to walk up and down the nave with babies in their arms; and even the smell of a cigar has been detected in the nave while service was being sung in the choir. The two parts of the building were altogether separate from each other. The choir was entered by doors under a high screen, composed partly of remains of Bishop "Chad's Shrine" and partly of other materials. This screen filled the whole of the first bay of the present choir. On each side of the entrance were vestries for the lay vicars and the choristers, and above these was placed the organ, the rest of the space, up to the roof, being filled in with glass, so that the separation of nave and choir was complete. The object of this separation was warmth—or the supposition of warmth, for the result was a signal failure, choir and nave being both bitterly cold. In the choir itself the remains of the original reredos, which stood at the spot where the present one is now fixed, had been removed by Wyatt at the end of the last century, and the holy table was carried to the extreme east of the Lady Chapel. On either side from the screen up to the very entrance of the Lady chapel were pews made of oak lined with green baize and studded with brass nails. The choir aisles all down the church were shut out from the choir, the arches being filled in by plaster—in order, as



was supposed, to help towards warmth. In the three bays eastward from the screen, the second, third, and fourth as they are now, were fixed stalls, composed of plaster, wood, rope, nails, &c., with canopies of the same material over them, which the old verger used to call "beautiful tabernacle work." The Dean and Canons Residentiary had stalls in the screen under the organ and facing eastward. At the end of the three bays occupied by the canopied stall, was placed on the south side the bishop's throne, and directly opposite to it the pulpit. The floor of the gangway between the pews was of black and white marble, such as is still to be seen in the Lady Chapel, and a flue ran down the centre for a certain distance, from which much more of cold than of hot air issued. The choir aisles, shut out from the choir, were long narrow passages, ending on the north side in a blank wall, on the south with the monument of the sleeping children. Canon Lonsdale afterwards described the work of restoration undertaken in the nave and transept. In moving the soil, on the west side of the present reredos, the workmen came upon bases of columns, which evidently formed no part of the existing building, for some of them were altogether out of the lines of the present arches, and such mouldings as could be traced on them were rude in character, evidently of an early date. No doubt a church had stood on the site from Norman and even from Saxon times, and here were the traces of it. In the course of these researches two, if not more, stone coffins were laid bare, and sundry odds and ends of early carving. The coffins were replaced in the spot where they were found; the pieces of carving are deposited in the library. The restoration of the nave was found to be comparatively plain sailing. The beautiful capitals, which it was feared might turn out to contain much plaster tinkering, were found, when the whitewash was removed, to be exactly as they are now. No reparation, even in the few places where the moulding is gone, was attempted. Of the stalls and throne the canon said: "The stalls and throne were executed by Mr. Evans, of Ellastone, and are a thoroughly good piece of work. Of course there was a contract price for them; but, when the payment was to be made, Mr. Evans put in a request for some 200*l.* or 300*l.* more than the contract, on the ground that he was so much out of pocket by the transaction. Although not the slightest variation had been made from the original design, Sir G. Scott pressed us to comply with this demand, but we steadily resisted it, urging that a contract was a contract, and that Mr. Evans was no novice at this kind of work. I was comforted shortly afterwards, when I told a Derbyshire friend of Mr. Evans's claim. 'Oh,' he said, 'you may make your mind easy; Mr. Evans is in the habit of driving about the country, and of pointing to a house here, and a church there, of which he has been the builder, saying, "Ah! I lost so much on this job, and so much on that," and yet,' added my friend, 'he is notoriously a well-to-do man.' I tell this story for the benefit of those who may be pressed in a like way." The pavement within the communion rails was alluded to as the noble gift of Messrs. Minton's. The first matter taken in hand after the reopening was the reredos, the money for which (2,000*l.*) was raised by the energy of Mrs. H. Howard, the wife of the dean. She had already presented the costly font in the nave. One main feature proposed for the reredos was that all the materials were to be taken from the diocese; and, with the exception of the green malachite, such was actually the case. The alabaster came from close to Tutbury, and the marbles the production of Derbyshire. The red marble employed was the special gift of the late Duke of Devonshire, and goes by the name of the Duke's Red. The then duke was said to be very chary of this marble, and would hardly allow the quarry to be opened. The interest, however, of Dean Howard caused an exception to be made in favour of the cathedral, and all that was wanted was freely supplied. The pulpit was a matter of much discussion. The opening sermon was preached by Bishop Wilberforce from a temporary wooden structure. It was suggested to Sir G. Scott that a stone pulpit should hang from the large pillar at the end of the nave, after the fashion of the beautiful model at Holy Trinity Church, Coventry. To this, however, he objected, because it would involve the cutting away of a large quantity of the original fabric. "Would the same objection," Canon Lonsdale ventured to say to him, "apply to metal?" "You have hit it," was his answer; and straightway Mr. Skidmore was commissioned to try his hand, the result being the pulpit of to-day. The last piece of restoration of importance was the so-called Consistory Court or Prebendary's Vestry. It is very early work, and in scraping the walls some puzzling features were discovered, pointed arches appearing in the north wall at a lower level than those of the same character which support the roof. Sir G. Scott felt baffled by this discovery, and it was decided to leave exposed what had come to light. A future generation may, perhaps, be able to solve the mystery. The work at this point was not finished until 1880. In conclusion, Canon Lonsdale said that, so far as the interior of the cathedral is concerned, the restoration is well nigh complete. Beyond the filling-in the statues of the ten niches in the Lady Chapel—a task which a public-spirited lady in the Close is doing her best to get executed—little has to be done by way of renewal. Additional stained windows and other ornamentation may of course be introduced, and it is hoped the north and south transept windows may be filled with better glass than that which they contain at present.

Of statuary we have well nigh more than enough; and it is hard to say where another recumbent figure could be lodged without inconveniently blocking the building.

### THE BIRLEY MEMORIALS.

THE sub-committee appointed on October 25 by a conference of the general purposes committee of the Manchester Church Building Society and the general purposes committee of the Board of Education—(1) to ascertain the form and cost of a suitable monument in the cathedral to the memory of the late Mr. Hugh Birley, M.P., and (2) to promote the formation of a committee to secure the erection of the proposed church in Denmark Road—have conferred with the dean and the cathedral architect, Mr. Crowther, on the first point, and have applied to several gentlemen of position and influence with respect to the second. Mr. Crowther advised that the cathedral monument should take the form of a tomb, with canopy, in Caen stone, and with marble recumbent figure. The dean approved of this form of monument, to be placed in the most easterly bay of the north aisle of the chancel, being the south-eastern bay of the Derby Chapel. The sub-committee recommend to the joint committee of the two diocesan societies that a monumental tomb should be erected on the site suggested by the dean and Mr. Crowther, at an estimated cost of 310*l.*, exclusive of figure. The cost of the figure is estimated to be 100*l.* in alabaster, and not less than 200*l.* if executed in white marble. It was subsequently decided to erect the tomb without a canopy, the general feeling further being that the material employed for the tomb should be polished granite in lieu of Caen stone, and the figure executed in white marble. Letters had been received in answer to applications for support of the proposal of a memorial church to be erected in Denmark Road. The secretaries of the Church Building Society have been asked to ascertain what other members of its committee are willing to contribute, and who will act as a committee for the new church.

### ARTISANS' DWELLINGS.

A PAPER on "The Artisans and Labourers' Dwellings Acts, with Suggestions for their Improvement," was read by Dr. Tripe, Medical Officer of Health for Hackney, at the meeting of the Society of Medical Officers of Health on the 21st inst. The author said that the Acts which dealt with artisans' dwellings were, if taken as a whole, very objectionable. In London they placed the duty of carrying out the provisions on two different local authorities—the Metropolitan Board of Works and the Vestries and District Boards. If the work was to be effectually carried out, great alterations must be made in the machinery for working the law as well as in the cost. It was scarcely seemly that the state of the law should be such as to allow of a representation from a medical officer of health to the effect that certain houses were unhealthy and required pulling down, being thrown from one Board to another like a shuttlecock. One thing he would propose was that a landlord might be enabled to obtain an order from a magistrate for the speedy eviction of a tenant on the certificate of a medical officer of health, corroborated by his own oath, that a room or house was unfit for human habitation, in consequence of its dirty or dilapidated condition, defective structure, or from overcrowding. The chief alterations in the law which Dr. Tripe proposed were—That there should be a central authority to whom all reports of houses unfit for human habitation, in consequence of their surroundings or of their defective structure, should be referred; and that improvements should be made in the cost of and the procedure for acquiring these houses and the land upon which they were built, as well as the regulations under which the new dwellings were to be erected; that houses which could be rendered fit for habitation without being pulled down should be dealt with by the local authority, the certificate of the medical officer of health, and the report of the surveyor to determine to which body the matter should be reported in the first instance; that regulations should be made for the whole of London for enforcing a periodical cleansing and repairing of houses at a less rental than 20*l.* a year and of all houses let in lodgings; that a register should be kept at the office of the local authority for registration of the names of the owners; and that the local authority should be able to close the whole or part of such house after the owner had been summoned before a magistrate for penalties and neglect. In the discussion that followed the reading of the paper, Dr. Dudfield said that Torrens's Act, according to his experience, was perfectly useless for purposes of improving the condition of the houses of the poor. It was perfectly monstrous that so much time, trouble, and expense should be necessary to get wretched hovels condemned. What was wanted was some very drastic legislation for dealing with this question. One great difficulty which had to be dealt with was that this wretched property was the best paying of any property. Some arbitrary power was wanted for enabling local authorities to purchase houses at something like the value of the property regarded



as dilapidated and uninhabitable houses. He thought that the medical officers of health should have the power to fix a fair rent. The amounts paid by the poor in some parts of London were entirely out of proportion. The poor should have insured to them fixity of tenure and fair rent. Several other medical officers present gave their experience of the working of existing laws for the purposes of sanitation. Complaint was made of the way in which the Metropolitan Board of Works carried out their duties in respect to the dwellings of the poor. Dr. Tripe replied, and stated that by persuasions and threats he had done more than he could have done by law. The offenders were generally very much afraid of publicity, and sooner than have their names brought before the public would spend a good deal of money in carrying out improvements.

### THE LIGHTING OF LIGHTHOUSES.

A LECTURE was delivered lately in Sunderland by Mr. B. Morton, superintendent of lighthouses for the north-east coast, on the "Lighting of Lighthouses." After sketching the early history of lighthouses, and referring to the first lighthouse built in this country at Dover by the Romans, he stated that from the first establishment of lighthouses, to late in the last century, the illuminaries were generally wood or coal fires. In 1696, tallow candles were adopted in the first Eddystone, and about 1763 rude flax wick oil lamps were employed at the Liverpool lighthouses, in combination with reflectors, the suggestion of Wm. Hutchinson, master mariner of that port. The invention of Argand about 1780 provided a more efficient means of illumination, which, in conjunction with paraboloidal reflectors, were soon generally adopted, and these again were replaced by the large concentric wick lamps and lenses of Augustin Fresnel. These originally could only be procured at Paris; but, owing to the energy and skill of Mr. James Chance, of the firm of Chance Brothers & Co., Birmingham, the industry had been transferred to Birmingham; but any one who had visited Souter Point Lighthouse could not fail to be struck with the perfection and finish in every part of the important apparatus, which was designed by Mr. James Chance, and manufactured by his firm; and apparatus produced by the firm may now be found in every part of the world. Up till about twelve or thirteen years ago, or a few years after the electric light had been introduced into the lighthouse service, the maximum power of a first-order four-wick lamp was 240 candles, and he was glad to say the electric light had had a satisfactory result in stirring up the question of lighthouse illuminants, with a view of obtaining the best possible results from oil and gas as it had been in the lighting world generally. About 1871 Mr. James Douglass—now Sir James Douglass—directed his attention to the improvement of lamps generally, and the Douglass lamp, which is now in universal use throughout the English lighthouse service. In the six-wick lamp the three outer flames would give a light equal to 340 candles, and the six wicks to 720 candles. This lamp had been further increased to eight wicks, and its greatest intensity is 1,150 candles. As the masthead lights of large steamers were now very bright, and might be mistaken for a fixed light under certain circumstances, there was the greater necessity that white fixed lights should be done away with, so as not to confound the one with the other. He then proceeded to explain the various methods adopted to give a distinctive character to each lighthouse. Fixed lights were gradually being altered to what was termed aculating, or blinking lights. Then there were flashing lights. He read the following statement showing the relative intensities of the lights in use throughout the service, as compared with what they were about twenty to thirty years ago, and the standard of comparison was Fresnel's four-wick lamp and fixed dioptric lens, the same as the Coquet light a few years ago; if this was supposed to give a light equal to 100 candles, a six-wick lamp would give 220 as used at the Start:—

#### *Dioptric Lights—Relative Intensities.*

	Candles.
1. Fixed dioptric light, with 4-wick lamps . . .	100
2. Fixed dioptric light, with 6-wick lamps . . .	220
3. Revolving (six sides) 6-wick lamps (Start) . . .	1,887
4. Double-flashing 6-wick lamps, single apparatus . . .	1,245
5. Double-flashing do., double apparatus . . .	2,560
6. Electric fixed (South Foreland) . . .	1,691
7. Electric fixed (Lizard) . . .	3,783
8. Electric revolving (Souter) . . .	7,797

Startling as these figures are, they showed how great had been the progress, not only in improving the power of the lamp, but, still more, how enormously the power of light had been increased by means of the more perfect lenses that were now fitted in lighthouses. The power of the electric light at Souter Point was 1,520, maximum power 3,040; at Foreland, 3,040; at the Lizard, 3,620 and 8,250. Although the power of the electric lamp at Souter was much less than the one employed at the Lizard, yet, owing to Souter being a revolving light, the power of the beam is about twice that of the Lizard. The Eddystone furnished good evidence of the progress in lighthouse illumination, and of the

enormous value of perfect optical apparatus for the utilisation of the illuminant. The original chandelier light in Smeaton's lighthouse was unaided by optical apparatus. It consisted of six tallow candles, weighing about six ounces each; the intensity of the light of each candle had been found to be about 2·8 standard sperm candles; thus the aggregate illuminating power radiating from the 24 candles was about 67 candle units. The consumption of the candles was about 3·4 lb. per hour, and the cost of the light per hour, at the current price of tallow candles, would be about 1s. 6½d. At the shore lighthouses mineral oil is adopted, and at the Eddystone, as at the other rock lighthouses, colza oil is employed on account of its greater safety in use and storage. For the whole year during which the lamps of the Eddystone are burning, between sunset and sunrise, 4,412 hours clear weather, 1,471 thick weather, the cost of the illuminating oil per hour, inclusive of wicks and glass chimneys, was 1s. 7¼d. per hour, being only ½d. more than the present cost per hour would be of the original candles, light at this station of only  $\frac{1}{3882}$ th part of the intensity of the present light. The actual candle power of the lamp is 184 times as powerful as Smeaton's light. On the other hand, as seen by the mariner, assisted by the optical apparatus, it is equal to about 150,000 candles, or 1,900 times the original power of Smeaton's light. Although the power of the light has been enormously increased, yet during certain states of the weather its visibility is not so great as might be expected. Mons. Allelarde, a distinguished French lighthouse engineer, has recently experimented upon the visibility of lights of different intensities during hazy and foggy weather, and according to the theory laid down by him, supposing the weather was such that Smeaton's 67 candle light was only visible at one mile, the audience may be surprised to learn that this magnificent light at the Eddystone would only be seen about three and a half miles. I may state further that the Trinity House is about to erect on St. Catherine's Point, Isle of Wight, an electric light produced by De Meritin dynamo. When one machine is at work the light will be equal to 30,000 candles, or about twenty times the intensity of the electric light at Souter Point; and when the two are employed the intensity will be equal to 60,000 candles, which, when assisted by the optical apparatus, will be a blaze of light of extreme brilliancy, and yet it is conjectured under similar circumstances to Smeaton's when seen at one mile, St. Catherine's will be visible about five miles. Mr. Morton described by diagrams how the light is condensed by the light apparatus. The power of the electric lamp is 1,520 candles, unaided by any optical apparatus; but by the arrangement of glass the light is made equal to the unassisted light of 800,000 candles. The lecturer said he had known three generations of the Darling family. For two thousand years lighthouse illumination had practically remained unchanged, there being nothing but coal fires used. To show the progress that had been made in three generations, he mentioned that one of the Darling family—which was a household word now in the north of England—the father of Grace Darling, had informed him that in the early period of his life as a light-keeper he kept the coal fire at the Brownsman Tower, one of the group of the Farne Islands, and that about the end of last century the reflex and Argand lamps were introduced, and were considered a marvel of scientific skill at the time. His (Mr. Darling's) son, William Brookes, was principal keeper at the Coquet lighthouse, where Fresnel's burner and the dioptric lens were in use; and now the son of the last-named was an assistant keeper at the Souter Point lighthouse, where the electric light was in use and nightly shedding its rays equal to 800,000 candles. The old Fresnel had been in use at the Coquet lighthouse till about six years ago.

### EXCAVATIONS AT ASSOS.

AN account is given in some German papers of the excavations which have been carried on at the site of Assos, one of the oldest cities of Asia Minor. It is mentioned in the Sallier papyrus among the auxiliaries of the Hittites, at Kadesh, on the Orontes, against Rhamses the Great, 1,400 years B.C. It was built on a steep hill, of volcanic origin, south of the Trojan plain, was well protected by its position from hostile attacks, and seems to have been inhabited by a purely Greek population far down into our era. Why it was abandoned we know not. It cannot have been because of its destruction, for most of its buildings are still well preserved; indeed, the best preserved specimens of profane Greek architecture are to be found here. Even the burial-places are in excellent preservation. One hundred and twenty-four sarcophagi were found in one row, all undisturbed; some of them dated from the seventh century before our era, and some belonged to the eleventh century after Christ. But few objects of value were to be found in the tombs. All around the market-place the buildings are in admirable condition. On one side is a pillared portico 110 metres long; on another is still to be seen the raised dais whence speakers harangued the public assembly; on a third side is the Bouleuterion, or council chamber, a handsome building. On the fourth side are the baths, the only Greek specimen of the kind. They are in four storeys, each of the lower two having 26 bathing chambers divided by a corridor. The water came from a



vast cistern constructed under the market-place. The upper storey seems to have been transformed into a Heroon, where the ashes of renowned citizens were deposited, and ashes were found in some funeral urns there. All the buildings have been erected out of the stone of the mountain, which resembles fine granite, and they show a regular architectural development. The exploration has been carried out under the superintendence of some American archæologists.

### GLASGOW ARCHÆOLOGICAL SOCIETY.

AT the last monthly meeting of the Glasgow Archæological Society Dr. David MacKinlay read a paper on "Stonehenge and Abury," illustrated by models and diagrams. Having given an account of the ruins as they stood when noticed by the earliest observers, and their present condition, he dealt with the suggestions as to their origin, and expressed the opinion that, instead of being an outcome of the religious feelings of the ancient Britons, they were rather of a monumental character, erected either to commemorate some great victory or the burial-place of the eminent dead. A discussion followed. Professor Veitch (the chairman) said there seemed to be an inclination between two extremes—if a monument of this kind was not thought to be of a religious character, it was assumed to be of a sepulchral character. He thought—and he judged so from various stones he had examined in the south of Scotland—that these relics were of a combined nature. They both represented the religious and the sepulchral elements, for the ancient Britons were worshippers of ancestors. Mr. W. G. Black also read a paper on "Lanarkshire Folklore."

### NEW MEXICO.

A CORRESPONDENT of the *Times* who is travelling in New Mexico, gives an account of some of the towns in that remote region. There are, he writes, two towns of El Paso, one on the Texas or American side, and the other on the Mexican bank of the river. A considerable military post is located near the former, and it presents an altogether curious example of a southern frontier town. Side by side in the streets stand the low whitewashed houses of the Mexicans, conspicuous by porches and water-spouts, and newly-erected blocks of red brick in the very latest fashion of that nondescript architecture so plentiful in Western American cities. The Chinese quarter is in the midst of the town. The ancient graveyard is crowded by a dingy sheep corral. Smallpox flags are common. There is a new railway station and an old hotel. The streets are filled with desperadoes and gamblers. The people speak English and Spanish, but neither correctly. One is willing, indeed anxious, to leave it behind. The Rio Grande at this point in its course is a broad, low-banked stream, which until lately was crossed by fording. Now there is an adequate bridge connecting the American El Paso and the Mexican El Paso Del Norte. There is an old and a new town of El Paso Del Norte, as in all the Mexican cities which have been galvanised into life by the advent of the railway. Del Norte new town is insignificant in extent as compared with the older quarter, which spreads out over a good many acres of ground. The new station built by the Mexican Central Railway is a modern building, preserving the characteristics of Mexican architecture. It has a wooden frame, but the walls are of mud, encircling an open court surrounded by porches, which, if not so simple in design as a Moorish colonnade, are lighter and less obstructive. The new features of the town, however, have no great interest for the traveller. He concerns himself more with the stranger life of another century which still survives in the native colony. El Paso Del Norte is the oldest settlement in Northern Mexico. A mission was established here by a Franciscan monk in 1585, when a colony formed of a dozen families from Old Castile took possession of the spot. A few years later they were joined by the Spaniards who had been driven out of New Mexico. The streets are long, narrow, and dusty. The houses are all of adobe, most of them surrounding miniature courts. Flowers, and sometimes a fountain, ornament these enclosures; but the street front of the house has no feature that is attractive. The windows, even, are barred or grated. The principal streets lead to the plaza, on one side of which stands an old Jesuit church, built, according to local tradition, three hundred years ago. The interior of the church is rough and bare. A few gaudy but utterly worthless trinkets adorn the altar, a few cheap prints in bright colours are nailed to the wall. The roof is held aloft by long logs of wood, rudely carved by the penitents of the old village. The only really interesting part is a gallery at the back, which is reached by a spiral staircase of curious workmanship. But the vandal could not spare this. He has been here with his paint pot, and daubed over much of the wood with thin white paint. Such of the beams and railings as the restorer has spared show the rich deep brown of the natural wood.

Chihuahua, 225 miles distant, has well-kept streets and rows of

chalk-white houses of stone or adobe. The plaza is more animated as the swarthy women with gourds and earthen pitchers on their heads pass and repass continually to the fountain. There is never an hour in the day when they are not coming or going. And men in gay coloured serapes loiter in the shade or move by with measured step. The water in this fountain is brought from a neighbouring mountain by a stupendous stone aqueduct, which has withstood the ravages of time for over 150 years without repair of any kind. A drive to the outskirts of the city brings the arcades of this vast piece of masonry into view, and shows how faithfully the enslaved labourers, building better than they knew, did their work. The cathedral facing the plaza is a remarkable structure for the country and manner in which it was built. If a thing so unworthy can be compared to a work so grand, it may be said to resemble the splendid cathedral of Antwerp. The structure is wholly of stone quarried from one of the mountains, and was built from a levy on each marc of silver produced from the St. Eulalia mine in Chihuahua, one of the richest in Mexico, and therefore in the world. The cathedral was 100 years building. Instead of having been hoisted, the stones were all carried to the top by mules. A hill was built up to the wall at the back, and on this the animals made the ascent. As the walls grew more dirt was hauled on to the incline, and so the task was pursued to the end. When all was finished it took between two and three years to remove the hill which had been thrown up, and which by that time (as the grade could never be heavy) had extended back into the city. On the façade of the church, between the half Gothic, half Moorish, columns are roughly sculptured effigies of the Apostles. Inside, the sights are not many. There is a certain amount of simple carving about the woodwork, and there are a few pictures. The present floor is a wooden one, and beneath it the bodies lie six and seven deep. The convent of San Francisco in the city has celebrity from the fact that it was there that the patriot Hidalgo was confined. To the market-place is but a step. A longer walk leads to the green semicircle of the Alameda, where Fashion mounts its chariot. Chance glimpses of the interiors of some of the houses are obtained from the street. Sometimes the brightly-painted walls are like visions of Naples, and the green courts are always attractive. The Chihuahua shopkeepers have a custom of displaying only samples to the eye of the public; the stock is stored away in some mysterious recess at the back, usually in an adjoining room.

### ELECTRIC LIGHTING FOR COUNTRY MANSIONS.

ALTHOUGH during the past year electric lighting has not made much progress towards coming into general use for the public, yet a considerable amount of work has been quietly carried out for private installations for supplying large country mansions, &c. Messrs. J. Edmundson & Co., of 19 Great George Street, Westminster, who have for many years made the lighting of large country mansions their speciality, have, during the past year, introduced the incandescent electric light very successfully into a number of large country residences, the following being some of the largest: Didlington Hall, Brandon; Membrand Hall, Ivybridge; Avenue House, Finchley; Warter Priory, Pocklington, &c. The motive power used is different according to circumstances; in some cases being steam, and in others a gas engine, whilst in one or two cases sufficient water power has been found to generate the electricity. Several of these installations have now been working for a considerable time, and have proved that there is no difficulty whatever in this mode of lighting for country-houses, which is both economical and pleasant, the absence of heat and all products of combustion enabling the lights to be used in places where gas or oil lamps would be quite inadmissible. An intelligent labourer can easily take charge of the apparatus.



#### The Housing of the Poor.

SIR,—My attention has been called to a paragraph in your journal to the effect that industrial dwellings are to be erected in St. Luke's on a plan devised by me. This statement is entirely devoid of foundation, and, as it has been copied into other journals, I must ask you to give prominence to my contradiction.

I am, Sir, yours obediently,

GEO. R. SIMS.

Harewood House, Tunbridge Wells :  
December 22, 1883.



## LEGAL.

**High Court of Justice.—Court of Appeal.—Dec. 21.**

(Before Lords Justices COTTON, LINDLEY, and FRY.)

RUSSELL v. WATTS.

LIGHT AND AIR CASE.

The question raised in this case was one of some importance as to the right to access of light. On March 31, 1866, Mr. J. R. Jeffery, who carried on a large drapery business at Liverpool, obtained grants from the Corporation of Liverpool of seven leases, described as A, B, C, D, E, F, and G, of seven plots of land in Liverpool, adjoining each other, for terms respectively of seventy-five years, and he covenanted thereby, for himself, his executors, administrators, and assigns, to build on the land, which comprised in the whole about two acres, according to plans to be submitted by him to, and to be approved by, the council of the borough. He originally intended to erect one large building on the whole of the land for the purposes of his business, but he was compelled by the insurance companies, with which he desired to effect insurances against fire, to alter this plan, and to erect instead seven blocks which communicated with each other and were capable of being occupied as one building, but which could be shut off from each other by means of iron doors and iron shutters to the windows. The whole building was known as Compton House. Some of the rooms in the block were lighted by means of windows looking upon deep well-holes or shafts which were covered with skylights. The building was completed and opened for business by Jeffery in May 1867. During the progress of the building Jeffery obtained advances of money by means of mortgages of the leases. By a deed of June 30, 1866, he mortgaged the property comprised in three of the leases (C, F, and G) to Messrs. E. & R. Moon, "together with all buildings, erections, &c., privileges, easements, and advantages to the said pieces of land appertaining, or with the same or any of them, demised, occupied, or enjoyed." This deed contained a recital of the intention of Jeffery to erect on the land thereby demised and on the other four plots one continuous building, but in such manner as to be capable of subdivision into separate buildings, and that the plans, having been approved by the council of the borough, had been, so far as related to the plots thereby demised, approved by the surveyor of Messrs. Moon, and it was agreed that subject and without prejudice to the provisions of the several leases Jeffery should build and finish on the land demised to Messrs. Moon in accordance with the plans approved by the surveyor. On December 17, 1866, Jeffery mortgaged the property comprised in lease B to Messrs. Brocklebank, Littledale & Tobin. In 1871 Jeffery became a bankrupt. In July 1872, Messrs. Brocklebank obtained a foreclosure decree absolute of the property comprised in lease B, and in January 1873, a similar decree was obtained by Messrs. Moon as to the property comprised in lease C. The plaintiff was originally an underlessee of Messrs. Brocklebank, and occupied the property underleased to him as an hotel, called the Compton Hotel. Messrs. Brocklebank subsequently surrendered the original lease to the corporation, and obtained a new one, and in June 1880, the plaintiff purchased their interest in the new lease. The defendants, in November 1876, purchased from Messrs. Moon their interest under the original lease C, and occupied the property comprised in that lease for their business of haberdashers. The plaintiff's premises were in part lighted by windows which opened on a well-hole situate on the defendants' premises, and the defendants in May 1880, blocked up those windows by nailing boards over them, and afterwards by tarring them over. The action was brought to restrain the defendants from committing acts of trespass, and also to restrain any obstruction of the plaintiff's light derived through the windows in question. Vice-Chancellor Bacon granted an injunction, and the defendants appealed. On the hearing of the appeal it was admitted that the acts of trespass could not be justified.

Lord Justice Cotton said the question was whether there was any implied reservation of an easement of light when the grant was made by Jeffery in June 1866, to the defendants' predecessors in title. There was an enormous difference between a grant and an implied reservation. As a general rule a man could not derogate from his own grant. As regarded a reservation, the matter stood in an entirely different position. The object of an implied reservation was to derogate from the grant, to render it less beneficial to the grantee. These were, no doubt, exceptions from the general rule, as in the case of an essential easement, such as an easement of mutual support of two houses, or the case of a way of necessity, as if a man sold the land surrounding a field which he did not sell. It would be assumed that he intended to use that field, and a way of necessity to it was said to be reserved by implication. There was also another case, which was not really an exception, when several grants were made by the same grantor, not actually contemporaneously, but so as to form really one transaction, then each grantee was held to have the benefit of an implied grant or reservation of those easements, which were really necessary to the enjoyment of the property granted to him. His Lordship was of opinion that there was nothing in the mortgage to Messrs. Moon to lead to an inference that it was intended there should be

any reservation, nor did he think that any reservation was to be implied from the circumstances. Each block of buildings had an interior area or well which, to a great extent, provided for its lighting. It was not suggested that the plaintiff's block could not be lighted from its own internal well. It was not like the case of a way of necessity; it was only a question of more or less commodious occupation. It would be wrong to imply any reservation from the nature of the grant or from the surrounding circumstances. Could it be said that the mortgages were really all one contemporaneous transaction? Could it be said that when the first mortgage was made by Jeffery the others were in his contemplation? His Lordship was of opinion that it could not. But the Vice-Chancellor had decided to a great extent on the ground that there was some equity against the defendants or their predecessors on the ground that they had allowed Jeffery to spend money in the erection of the other buildings. His Lordship could see no such personal equity. The defendants' predecessors did nothing but look on. It would be quite different if it could be shown that they had induced Jeffery to do some acts on the supposition that they would not interfere with him, or if they had known of any facts which he did not. They had no reason to suppose that he did not know his rights. His Lordship was of opinion that there was nothing to justify the conclusion of the Vice-Chancellor. The defendant Duckworth had done nothing to interfere with the plaintiff, and ought not to have been made a defendant, and as against him the action must be dismissed with costs. There would be no costs of the appeal.

Lord Justice Lindley differed. He said that the case was not that of a vendor of a piece of land attempting to derogate from his own grant. It was more like the case of several persons interested in several pieces of land all agreeing to build upon them in a particular way so as to accommodate one another, and of one of them afterwards, when the buildings are up, insisting on rights which were quite inconsistent with the enjoyment of the buildings as erected. There was no authority to show that in such a case any one of such persons could afterwards build on his own land so as to obstruct his neighbour's light, and in the absence of such authority he was of opinion that he could not do so. In such a case, it appeared to His Lordship that the cross-easements which were created in the first instance were impliedly granted in equity, if not at law, and, if such easements were apparent, no purchaser could protect himself against them by alleging that he bought without notice of them. As regarded notice the recitals in Moon's mortgage, and the state of the building, gave the defendants clear and direct notice of the mode in which it was intended to build on the several blocks, and of the mode in which that intention had been carried out. The defendants were in no better position than the mortgagees under whom they claimed. So far as the defendant Watts was concerned, His Lordship was of opinion that the decision of the Vice-Chancellor was correct, and that their appeal ought to be dismissed. As regarded Duckworth, the case was different. He had in no way interfered with the plaintiff's lights, and he ought not to have been made a defendant. This appeal ought, therefore, to be allowed, and the action against him ought to be dismissed with costs.

Lord Justice Fry concurred with Lord Justice Cotton. The Vice-Chancellor had characterised the conduct of the defendant Watts in blocking up the plaintiff's windows as "brutal," and His Lordship did not differ from that view, and he thought that the defendants ought to have no costs of the appeal.

## CHURCH BUILDING AND RESTORATION.

**Cheltenham.**—The church of St. Stephen, Tivoli, Cheltenham, has now been completed, with the exception of south porch and tower and spire, proposed to be built on the north side. The internal dimensions are—nave, 80 feet long and 22 feet wide and 41 feet 7 inches high; side aisles, 81 feet long and 10 feet 6 inches wide; chancel, 38 feet long and 22 feet wide. The style of architecture is Early English of late period. The material used is local stone for the external walling, the dressing and internal linings of the church being of Bath stone, relieved in the interior by the introduction of blue Forest stone and red Mansfield in connection with the piers, arches, shafts, and strings. The total cost has been under 6,000*l.*, and the church will accommodate 580 people. The whole has been built from the designs of Messrs. Middleton & Son, of Westminster and Cheltenham. The contractor was Mr. William Jones, of Gloucester. The carving of the chancel has been executed by Mr. Boulton, and that of the nave and stalls by Messrs. Martyn & Emms; the lighting and warming by Messrs. Marshall, and the ornamental hinges by Mr. Letheren, all of Cheltenham.

**Hereford.**—The chancel of Wellington Church, near Hereford, has been reopened, after complete restoration by the Ecclesiastical Commissioners. The restoration has been carried out in the strictest manner, according to the plans of Mr. Ewan Christian, architect to the Ecclesiastical Commissioners. Part of the walls had to be taken down, but every bit of the material was replaced



in its original position. A new oaken ceiling was fixed with moulded ribs and principals, and a new priest's door was made with ornamental iron decoration by Mr. Letheren, of Cheltenham. Handsomely-carved new oaken stalls and oaken altar rail, the latter with iron ornamental standard, were provided, and the flooring was paved with Godwin's encaustic tiles. Mr. W. Cullis, builder, of Hereford, carried out the work.

**Morley.**—The foundation-stone of a cemetery-chapel has been laid. The chapel will consist of mortuary, chapel, and vestries, and will be surmounted by a spire 75 feet high. The style is Gothic, and accommodation provided in the chapel will be for 84 persons. The structure will be built of Northowram delph stone, with Morley dressings, and will cost about 1,000*l*. The contractors for the various works are—Messrs. J. & J. Sugden, masons; Mr. J. W. Binks, joiner; Mr. E. Thornton, slater; Mr. W. H. Jackson, plumber; Mr. E. Wilson, plasterer; and Mr. J. Parkin, painter. Mr. Joseph Sykes, of Morley, is the architect.

**South Wales.**—The new church of St. Winefred, at Penrhiwceiber, has been opened. The new church, which has been erected in a most commanding position, is in the Gothic style of architecture, built of native stone, the outside dressings being of Ombesley stone, whilst the inside dressings are of Bath stone. The church has been substantially built from designs by Mr. Thomas Nicholson, diocesan architect, of Hereford, by Mr. W. Cullis, builder, also of Hereford.

## ARCHÆOLOGY.

**Excavations at Dodona.**—The excavations recently commenced by M. Carapanos on the site of the ancient Oracle of Dodona, have already led to the discovery of the foundations of the ancient temple of Zeus. Other relics of ancient times have likewise been brought to light in the course of the diggings. The most remarkable of these objects are a considerable number of leaden tablets, on which are written questions that were at one time or other submitted to the ancient Oracle. Such inquiries were naturally left behind at the temple, while the replies were naturally taken away by those who put the questions when they departed home. Hence it is that, with a single exception, no answers have been found on the numerous tablets that have been discovered. In this exceptional instance, besides the question which is on one side of the tablet, the reply of the Oracle is found on the other side. The subject is of little importance in itself. A certain person named Antiochus asks the Oracle to what deity he is to address his prayers, in order that the members of his family may recover from maladies that had long afflicted them. The answer of the Oracle is in the usual indirect and ambiguous style. Antiochus is told that he must go to the city of Hermione and worship the goddess, who will meet him from the opposite island of Idrea, which may, perhaps, be interpreted as a roundabout way of recommending the invalids to try the effects of a sojourn at the seaside. This remarkable tablet has been sent to the Paris Academy of Inscriptions and Fine Arts.

**Roman Remains at Martigny.**—The Cantonal Archæological Commission, organised by the Council of State of Canton Valais, have lately undertaken some excavations in the neighbourhood of Martigny and brought to light several important relics of the Roman period. The spot chosen for the excavations was a meadow in the middle of Martigny, supposed to be the site of the ancient Octodunum. Here, at no great depth from the surface, were found massive walls, chiselled stones, cornices of jurassic marble, and much miscellaneous building material. The character of the relics pointed to the probability that they had formed part of an imposing edifice, such as a temple or a theatre. The excavations being continued, further finds were made, and on November 23 the workmen came on some splendid fragments of gilt-bronze statues. The metal is well preserved but covered with verdigris. The parts so far discovered belong to the best Roman age; among them are an arm and a leg of colossal proportions, the lower part of the body of a personage draped in a toga, with a hand and a forearm almost complete, and a bull's head and foreleg. The excavations are being continued and will, it is hoped, result in the finding of the remaining portions of the statues, in which case they can be restored to their original form. Not far from the spot where these relics have been unearthed was found ten years ago a complete Roman *batterie de cuisine*, consisting of forty pieces, now in the museum at Geneva. The Archæological Commission are conducting excavations in another part of Martigny, where they have partially laid bare the ruins of a circus or amphitheatre. The walls, though considerably decayed, are in several places three mètres high and form an oval arena 75 mètres long and 65 wide. The country about Martigny is undoubtedly rich in Roman remains, but Canton Valais has neither much money to spend in antiquarian researches nor any great disposition to spend it, and there are unfortunately no rich enthusiasts in the neighbourhood able and willing to undertake the work at their own cost.

## GENERAL.

**An International Exhibition** will be held in the Crystal Palace, Sydenham, on April 23, 1884. It is anticipated that the paintings will comprise examples by Belgian, French, German, Spanish, and Swedish artists.

**Mr. W. C. Quilter's Collection** of pictures has been lent to the Bethnal Green Museum. It includes works by Messrs. Linnell, Millais, Hook, Briton Riviere, Leader, Brett, Davis, Gow, and other artists.

**An Industrial Art Exhibition** will be opened in the Palais des Beaux-Arts, Brussels, on to-day (Saturday).

**The Belgian Houses of Parliament** will be restored so as to present a similar appearance to that which existed before the fire. The assembly hall of the chamber will be enlarged in area.

**The Osmaston Manor Estate**, Derbyshire, comprising the large house, 3,400 acres of land, and the model village of Osmaston, has been purchased by Sir Andrew B. Walker, brewer, of Liverpool, Warrington, and Burton-on-Trent. The purchase also includes the whole of the furniture, decorations, and carvings in the mansion, which was built by Mr. Wright at a cost of 200,000*l*.

**A Limited Open Competition** for St. Barnabas Church, Blackburn, has just been decided. Mr. A. Bell, Manchester; Mr. Joseph Bintley, Kendal; Messrs. Stories & Gradwell, Blackburn; and Mr. Varley, F.R.I.B.A., Blackburn, were invited to compete, and all of them sent in plans. The design of Mr. Varley has been accepted. It is in the Early English style of architecture, and will seat 1,000 worshippers.

**The Public Works in Scotland**, to carry out which private Bills are to be promoted next session in Parliament, are estimated to cost 8,000,000*l*.

**The Indian Census Returns** show that there are in the empire 10,347 male and 584 female artists; 1,005 male and 79 female workers in prints and pictures; 15,338 male and 4,663 female workers in carving and figures; 819 male and 16 female workers in designs, medals, and dies; 808,712 male and 27,741 female workers in houses and buildings; 9,343 male and 797 female workers in furniture; 459,159 male and 13,799 female workers in gold, silver, and precious stones.

**San Francisco** now contains 1,097 streets, avenues, and alleys, with 27,550 buildings. There are 92 church organisations, all of which have houses of worship in various parts of the city. The various manufacturing industries number 850, and of these 297 are incorporated in companies, and employ altogether 40,000 mechanics, making a total yearly manufactured product of upwards of 75,000,000 dols.

**The New Rules for Patents.**—The following notice has been issued by the Board of Trade: No applications under the New Patents, &c., Act, will be accepted if they bear a date prior to January 1, 1884, the day upon which the Act comes into operation. Copies of the rules under the Act can be purchased at the Patent Office, Sale Department, Cursitor Street, Chancery Lane. It will not be possible to place the forms for applications under the Act for sale at various post-offices before December 29, but any persons, if they think fit, may prepare forms in manuscript in conformity with the rules.

**Mr. George Pownall** has, it is understood, been appointed as arbitrator under Torrens's Act. It is provided that whenever the local authority serves notice upon an owner for structural alterations or demolition of his property, the owner may call upon the authorities to purchase such property upon terms to be settled by arbitration, and it is in consequence of the Marylebone local authorities being the first called upon to purchase under this provision that Sir Charles Dilke has provided for the present arbitration, which he expects will lay down principles of important bearing with reference to future applications of the Act.

**A Catalogue of the Works of Marc Antonio Raimondi**, the engraver, will be prepared by order of the Trustees of the British Museum.

**Ventilation of the Hospital Ship "Castalia."**—The Local Government Board have approved the adoption, by the Metropolitan Asylums Board, of Messrs. Robert Boyle & Son's Patent Self-acting Air-Pump Ventilators for the ventilation of the twin-ship *Castalia*, which, having been acquired by the board, is being converted into a smallpox hospital. We understand that this is one of the largest ventilating contracts that Messrs. Boyle have yet undertaken, as there are twenty air-pump ventilators, 6 feet in diameter and sixteen 3-feet diameter, included in the contract, which embraces all the necessary shafting, fixing, &c., &c. When the work is finished, owing to the elaborate and complete nature of the arrangements, it is expected to be one of the most unique examples of ventilation in existence. The air-pump ventilators are also being applied to the transport steamers attached to the *Castalia*. Messrs. Boyle are at present executing a large navy contract for the Dutch Government, their patent ventilators, upcast and downcast, supplied for the iron-clads, being made wholly of copper.



# SUPPLEMENT

TO THE

# ARCHITECT

## CONTRACTS, COMPETITIONS, AND TENDERS.

LONDON, DECEMBER 29, 1883.

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\* As great disappointment is frequently expressed at the non-appearance of Contracts Open, Tenders, &c., it is particularly requested that information of this description be forwarded to the Office, 175 Strand, London, W.C., not later than 3 p.m. on Thursdays.

\* Correspondents, when writing to notify an extension of time, or an alteration of the date of sending in Competitions or Contracts, are requested in their letter of advice to write at the head of the required change—"Contract Supplement to THE ARCHITECT."

### EDITORIAL NOTICES.

The authors of signed articles and papers read in public must necessarily be held responsible for their contents.

No communication can be inserted unless authenticated by the name and address of the writer—not in every case for publication, but as a guarantee of good faith.

Correspondents are requested as much as possible to make their communications brief. The space we can devote to Correspondence will not usually permit our inserting lengthy communications.

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### NOTICE TO THE PUBLIC.

By the Post Office arrangements THE ARCHITECT can now be sent to any part of the United Kingdom by an affixed Halfpenny stamp; hitherto the postage has very frequently been twopence per copy. The Publisher will be happy to forward, for 20s. per annum, post paid, THE ARCHITECT, to residents in towns and neighbourhoods to which there is no easy access by railway. Terms for the half-year, 10s.

Our readers are invited to address us on subjects of interest to themselves or the public. We shall be always ready to insert letters asking for a solution of any suitable questions of a professional or practical nature, and to receive replies to such inquiries.

### COMPETITIONS OPEN.

ABERDEEN.—July 1, 1884.—The Testamentary Trustees of the late Mr. John Steill, of Edinburgh, hereby notify that they will Receive Models for a Colossal Statue of Wallace, in Bronze, with Basement of Granite Blocks, to be placed on the Mound in the North-West part of the Duthie Public Park, near the City of Aberdeen, in conformity with Instructions left by Mr. Steill, at a cost not exceeding £3,000. Intending Competitors, on Application, accompanied with a Remittance of 10s. 6d. to Mr. John Otto Macqueen, 10 Bridge Street, Aberdeen, will be supplied with Copies of Mr. Steill's Instructions, Conditions of the Competition, and Lithograph Plan of the Duthie Park, showing Sections of the Mound. The Author of the Accepted Model will be employed to Execute the Work; and the Author of that next in order of merit will Receive a Premium of £50.

CAPE TOWN.—Jan. 30.—The Town Council of the City of Cape Town invite Plans and Specifications, accompanied with approximate estimate of cost, of a System of Drainage. Selected Plans and Specifications to become the absolute property of the Corporation. All others will be returned free of expense. Premium of 250l. A plan of the City, with levels, may be seen, and further information may be obtained, on application to the South African Loan, Mortgage, and Mercantile Agency, 9 King William Street, London, E.C.

HOWDEN.—Jan. 5.—For System of Sewerage and Sewage Disposal. Mr. Henry Green, Assistant Clerk to the Rural Sanitary Authority, Howden.

LONDON.—March 1, 1884.—The Commissioners of H.M. Works and Public Buildings are prepared to receive Designs for New Buildings proposed to be erected in Whitehall for the Admiralty and War Office. Mr. A. B. Mitford, Secretary, H. M. Office of Works, 12 Whitehall Place, London.

ST. PANCRAS.—Feb. 1.—Designs are invited for Buildings for Mortuary and Coroner's Court. Mr. T. Eccleston Gibb, Vestry Clerk, Vestry Hall, St. Pancras Road, N.W.

UXBRIDGE.—Jan. 31.—For System of Sewerage and Sewage Disposal. Mr. Charles Woodbridge, Clerk to the Rural Sanitary Authority, Uxbridge.

WALMER.—Jan. 21.—Designs are invited for Laying Out the Estate of St. Clare for Building Purposes. Messrs. W. & T. Denny, Walmer.

WOLVERHAMPTON.—Plans are required for the Erection of Volunteer Headquarters and Drill-hall. Major W. Blake Burke, Adjutant, Wolverhampton.

WORKSOP.—Jan. 5.—Applications are invited by the Worksop Local Board for the Appointment of a Surveyor at a salary not to exceed 150l. per annum. Mr. John Appleton, Clerk to the Local Board, 64 Bridge Street, Worksop.

### CONTRACTS OPEN.

ARDEE.—Jan. 15.—For Sinking of Open Drains or Water Courses on the north and south sides of the River Dee, and the Construction of Tanks and Sewers, with Auxiliary Works. Mr. Thomas B. Dromgoole, Sanitary Officer, Board Room, Ardee Workhouse, Ireland.

BARROW-IN-FURNESS.—Jan. 2.—For Pulling Down Three Cottages in Salthouse Road, and for Erection of House and Cottage. The Borough Engineer, Barrow-in-Furness.

BEDFORD.—For Building the Bedford Town and County Club. Mr. H. A. Cheers, Architect, Waldegrave Park, Teddington.

BELFAST.—Dec. 29.—For Rebuilding Albert Street Presbyterian Church. Messrs. Young & Mackenzie, Architects, Donegall Square East, Belfast.

BLACKBURN.—Jan. 12.—For Wrought-iron Girders and Castings for Bridge over Blakewater. Mr. J. Braddon McCallum, Borough Engineer, Municipal Offices, Blackburn.

BLOXWICH.—Jan. 9.—For Alterations to Leamore Schools. Mr. S. Loxton, Architect, Park Street, Walsall.

BODMIN.—Dec. 31.—For Further Repairs and Restoration of Parish Church of St. Patrick. Mr. R. J. Withers, Architect, 11 Adam Street, Adelphi, W.C.

BOLTON.—Jan. 19.—For Construction of Outfall Sewage Works at the Hacken. The Borough Surveyor, Town Hall, Bolton.

BRADFORD.—Dec. 31.—For the Works in the Erection of New Wool-combing Establishments at Alston Works, Bradford. Messrs. Milnes & France, Architects, 99 Swan Arcade, Bradford.

BRADFORD.—Dec. 31.—For the Works in the Extension of Shed and Erection of Buildings for Grease Works in Thornton Road. Messrs. Milnes & France, Architects, 99 Swan Arcade, Bradford.

BURMANTHOPE.—Jan. 7.—For the whole of Portion of Works in the Erection of Schools, Outbuildings, and Boundary Walls, Nippert Lane, for the Leeds School Board. Mr. R. L. Adams, Architect, Imperial Buildings, Bond Street, Leeds.

BURTON JOYCE.—For the Erection of a Detached Villa Residence at Burton Joyce, Notts. Messrs. Truman & Pratt, Architects, Long Row, Nottingham.

CLEETHORPES.—For the Erection of a Wesleyan Chapel and Schools. Mr. C. Bell, F.R.I.B.A., Architect, Dashwood House, 9 New Broad Street, E.C.



CULLOMPTON.—Dec. 29.—For Construction of Sewers. Mr. H. T. Bolt, Surveyor, Tiverton Junction.

DERBY.—Jan. 7.—For the Erection of a Girls' School on the Ashbourne Road. Mr. Coulthurst, Architect, Albert Street, Derby.

DITTISHAM.—Jan. 8.—For the Erection of a Small House at Dittisham, on the Dart. Mr. E. Appleton, Architect, 1 Vaughan Parade, Torquay.

DUBLIN.—Jan. 24.—For Building a Dispensary in South Earl Street, for the South Dublin Union. Mr. W. M. Mitchell, Architect, 10 Leinster Street, Dublin.

DUNDEE.—Dec. 29.—For the Erection and Completion of the Harris Academy, Park Place, for the School Board. Mr. David MacLaren, Architect to the Board, 81 Murraygate, Dundee.

DUMFRIES.—Dec. 31.—For Extension of Bridge over Highway at Passenger Station. Plans at the Engineer's Office, St. Enoch Station, Glasgow.

EAST WALKER.—Dec. 31.—For Building an Infants' School, and for Alterations and Additions to Board Schools. Mr. John Johnstone, Architect, 6 Clayton Street West, Newcastle-on-Tyne.

ECLESFIELD.—Jan. 2.—For Heating Hillsborough Board School on the Low Pressure System. Messrs. Wilson & Masters, Architects, Sheffield.

EGREMONT.—Dec. 29.—For Reconstruction and Additions to Farm Buildings and Dwelling-house at Whangs. Mr. Thomas Brindle, Beckermest.

ELTHAM.—Jan. 10.—For Construction of Brick Sewer (14,000 feet). Sir J. W. Bazalgette, C.E., Metropolitan Board of Works, Spring Gardens, S.W.

EYEMOUTH.—Jan. 7.—For Building Mortuary, Forming Cemetery, &c. Mr. J. Donaldson, Eyemouth.

EYEMOUTH.—Jan. 8.—For Improvement Works to Harbour. Messrs. Thomas Meik & Sons, C.E., 6 York Place, Edinburgh.

GREAT HEATON.—Jan. 2.—For Removal of Bridge and Construction of New Bridge over the River Irk. Mr. William Radford, Bridgmaster, 1 Princess Street, Manchester.

GUILDFORD.—For Building Stabling at the Angel Hotel. Mr. Charles H. Sparkes, C.E., 143 High Street, Guildford.

HACKNEY.—Jan. 2.—For Supply of Ironwork, consisting of Manhole Covers, Gully Gratings, &c. Mr. James Lovegrove, Chief Surveyor to the Hackney District Board of Works, Town Hall, Hackney.

HASTINGS.—For Additions to Hastings Lodge, Old London Road. Messrs. Jeffery & Skiller, Architects, 5 Havelock Road, Hastings.

HEREFORD.—Dec. 31.—For Building Police Barracks to consist of Twelve Houses. Mr. J. Parker, City Surveyor, Hereford.

HULL.—Jan. 17.—For Formation of Adit or Tunnel (one mile) from Springhead Pumping Station. Mr. D. Maxwell, Engineer, Town Hall, Hull.

INVERNESS.—Dec. 29.—For Building Villas in Ardross Street. Mr. Alexander Ross, Architect, Union Street, Inverness.

JARROW.—Jan. 3.—For Construction of Brick Sewers in Cement, with Outfall Works, Manholes, Connection, &c. from the River Don to Monkton Road. Mr. J. Petree, Borough Surveyor, Jarrow.

JARROW-ON-TYNE.—Jan. 10.—For Building Methodist New Connection Church. Mr. William Hill, F.R.I.B.A., Architect, 11 Park Square, Leeds.

KINROSS.—Jan. 17.—For Construction of Works for Supplying the Burgh with Water. Mr. W. R. Copland, C.E., 146 West Regent Street, Glasgow.

KEIGHLEY.—Dec. 29.—For Erection of Residence and Outbuildings, Highfield Estate. Mr. J. B. Bailey, Architect, North Street, Keighley.

LIGHTCLIFFE.—Jan. 12.—For Building a Villa. Mr. Charles F. L. Horsfall, Architect, Lord Street Chambers, King Cross Street, Halifax.

LITTLEBOROUGH.—For the Works in the Enlargement of Day and Sunday Schools for the United Methodist Free Church. Mr. John Stott, Architect, Ackroyd Chambers, Rochdale.

LLANISHEN.—Dec. 31.—For Construction of Large Storage Reservoir with Embankments, Valve Well, Culverts, Gauge Basins, &c. Mr. J. A. B. Williams, C.E., Queen's Chambers, Queen Street, Cardiff.

LLANSAMLET.—Jan. 7.—For Building School at Penvi Green. Mr. Rees Llewellyn, Architect, Llansamlet.

LOCHLUCHART, N.B.—Dec. 29.—For Erecting five miles and a half of Iron Fence in the March of Lochluchart Forest. Mr. John Macdonald, Lochluchart.

LONDON.—Jan. 23.—For Lighting the Mansion House by Electricity. Mr. Horace Jones, City Architect, Guildhall, E.C.

LONDON.—Jan. 25.—For Lighting certain Streets in the City by Electricity. Mr. Henry Blake, Sewers Office, Guildhall, E.C.

MERTHYR TYDFIL.—Jan. 4.—For Supplying and Laying 750 yards of Galvanised Tubing, and the Construction of a Small Tank, for Brithdir Water Supply. Mr. James Jones, Surveyor, Cefn Coed, near Merthyr.

MIDDLESBROUGH.—Jan. 19.—For Construction of Hury Reservoir (Contract No. 8). Mr. Mansergh, C.E., Engineer, 3 Westminster Chambers, Victoria Street.

MIDHURST.—Jan. 1.—For Works to be executed at the Casual Wards of the Union Workhouse at Easebourne, near Midhurst. Mr. Edwin Albury, Clerk of the Union, Midhurst.

NANTHR.—Jan. 1.—For Building an Hotel and adjoining Houses at Nanthir, Garw Valley. Mr. J. Rees, Pontycymmer.

NORWICH.—Jan. 4.—For Alterations at Medical Institute, Lady Lane, Norwich. Mr. W. C. Brundall, Secretary.

OLDHAM.—For Building Stabling for seven Horses, Harness-room, and Coach-house, Crossbank Street. Mr. Corns, Architect, 2 Lord Street, Oldham.

PENDLETON.—Jan. 16.—For Erection of Public Baths in Broad Street and Frederick Street. Mr. Lawrence Booth, F.R.I.B.A., Architect, 28 Faulkner Street, Manchester.

PORTO RICO.—Dec. 31.—For the Harbour Works of San Juan. Forms of Tender, &c., at the Consulate-General for Spain, 31 Billiter Street, E.C.

READING.—Jan. 22.—For Works required in Alterations of the present Buildings of the Reading and Earley combined Board School, and in the Erection of Additional Buildings for the Infants' Department. Messrs. Morris and Stallwood, Architects, Friar Street, Reading.

REDDISH.—Jan. 9.—For Construction of Sewage Purification Tanks and other Works in connection therewith. Mr. Edward Sykes, the Union Offices, Shaw Heath, Stockport.

RIO DE JANEIRO.—Feb. 28.—For Lighting the City with Electricity. The Brazilian Consulate General, 6 Great Winchester Street Buildings, E.C.

SNYDALE.—Jan. 5.—For Erection of Board Schools for Boys, Girls, and Infants, with Master's House, Offices, Boundary Walls, &c. Mr. W. Shackleton, Architect, Market Place, Pontefract.

SOUTHALL.—For Construction of Staircase to the Schools of the Guardians of St. Marylebone. Messrs. H. Saxon Snell & Son, Architects, 22 Southampton Buildings, Chancery Lane, W.C.

SWANSEA.—Jan. 23.—For Erection of New Blocks and Extensions and Alterations to the present Swansea Union Workhouse. Messrs. Blessley & Aspinall, Architects, Cardiff.

VENTNOR.—Jan. 7.—For Building Bank Premises for the Capital and Counties Bank. Mr. Theodore R. Saunders, Architect, Church Street, Ventnor, Isle of Wight.

WARWICK.—Dec. 29.—For the Erection of Three Brick Huts for Twenty Men, One for Twenty-eight Men, Latrine Accommodation, and Pulling Down and Rebuilding Skittle Alley, Ashbin, &c., at Budbrooke Barracks. The Royal Engineer Office, 434 Coventry Road, Birmingham.

WEST WALKER.—Dec. 31.—For Extensive Additions and Alterations to the Board Schools. Mr. John Johnstone, Architect, 6 Clayton Street West, Newcastle-on-Tyne.

WOODHOUSE.—Jan. 7.—For the Erection of Schools, Outbuildings, and Boundary Walls, Quarry Mount, for the Leeds School Board. Mr. R. L. Adams, Architect, Imperial Buildings, Bond Street, Leeds.

WORKINGTON.—Dec. 31.—For Alterations to Working Men's Club. Mr. Lynas, Secretary, 19 Marshside, Workington.

YORK.—Dec. 31.—For Erection of Building for the York Institute of Art, Science, and Literature, Clifford Street. Mr. W. Penty, Architect, 34 Coney Street, York.

## BRADFORD.

For Rebuilding Manufactory, Warehouse, and Offices in Hammerton Street, Bradford, for Messrs. Henry Glover, Son & Co. Mr. W. BAILEY, Architect, Bradford.  
Birkby & Son, Wyke, mason and joiner.  
E. & W. H. Haley, Bradford, ironfounder.  
Nelson, Bradford, slater.  
Haigh & Slater, Listenhills, plumber.  
Cordingley & Sons, Bradford, plasterer.  
Harland & Son, Bradford, painter.

## COLCHESTER.

For Erection of Workshop, Colchester Union.

Ambrose	£197 11 6
Wiles	191 18 0
Rice	191 18 0
Sansom	190 10 0
Start	181 10 0
Farren	169 0 0
Lee	165 0 0
Malster	165 0 0
Oldridge	147 0 0
Gladwell	145 0 0
Pitt	144 19 0
GARWOOD (accepted)	144 17 0

## CONINGSBY.

For Erection of small Mortuary Chapel for the Coningsby Burial Board.

Jackson & Creasey, Coningsby, Boston	£559 0 0
Knight, Morton, Sleaford	437 0 0
Johnson, Coningsby, Boston	418 0 0
Wallis & Son, Spalding	400 0 0
Hatchliffe, Billinghay, Sleaford	390 0 0
Hobson, Hogsthorpe Alford (accepted)	357 0 0

## Fencing.

Barlow, Coningsby	38 0 0
Hobson	33 0 0
Johnson	32 0 0
Knight	25 15 0
Wallis & Son	24 0 0
Hatchliffe	24 0 0
JACKSON & CREASEY (accepted)	20 10 0

## DUNDEE.

For the Erection of Stable Offices at Taymount, Broughty Ferry, Dundee, for Mr. Wm. Lowson, jun. Messrs. JAMES MACLAREN & SON, Architects, Dundee.

Bennet & Taylor, Broughty Ferry, mason.  
Steven, Broughty Ferry, joiner.  
T. & A. Lamond, Broughty Ferry, slater.  
Brown, Dundee, plumber.  
T. & A. Lamond, Broughty Ferry, plasterer.  
Bartholomew & Marshall, Dundee, ironwork.  
Musgrave & Co., Dublin, stable fittings.  
Total cost, £1,600.

## EALING.

For the Erection of a House in Mount Park Road, Ealing. Mr. ROBERT WILLEY, Architect, 66 Ludgate Hill.

Jones & Sons, Ealing	£1,375 0 0
Penny & Durrant, Ealing	1,220 0 0
Rickets, Kilburn	1,220 0 0
Bailey, Ealing	1,198 0 0
Nye, Ealing	1,149 0 0
Waters, Ealing	1,026 0 0

## GREENWICH.

For Supply of 5,000 feet of 3-inch and 500 feet of 2½-inch tooled York Paving-stone for the Greenwich District Board of Works. CANN (accepted).

## HASTINGS.

For Erection of Cricket Pavilion, Central Recreation Ground, Hastings. Mr. ARTHUR WELLS, Architect, 27 Chancery Lane, W.C., and 25 Havelock Road, Hastings. Quantities by the Architect.

Friend, Hastings	£1,285 3 0
Rodda, Hastings	1,150 0 0
Taylor Bros., Hastings	1,120 0 0
Foster & Dicksee, Rugby	1,111 0 0
Cruttenden, Hastings	1,094 0 0
Wren, Hastings	1,069 0 0
Vidler, Hastings	1,062 0 0
Howell & Son, Hastings	990 0 0
Stace, Hastings	986 0 0
FOSTER, Hastings (accepted)	852 0 0

## KEIGHLEY.

For Additions to Burlington Works, Keighley. Mr. W. BAILEY, Architect, Bradford.  
OBANK & SONS, Thackley, Idle (all the works).

## KESWICK.

For Street Improvement Works, Keswick.

T. & J. Hodgson	£467 13 9
BROMLEY (accepted)	446 8 3

## LINCOLN.

For Building Three Houses, Lincoln. Mr. J. T. DRURY, Surveyor.

Whelpton	£746 0 0
H. S. & W. Close	739 0 0
Wright	698 0 0
Crosby & Sons	695 0 0
HARRISON (accepted)	669 10 0

For Churchyard Improvement, St. Botolph's, Lincoln.

Harrison	£103 10 0
Horton	97 0 0
SIMPSON (accepted)	96 8 0

## TENDERS.

## ABERDEEN.

For Warehouse to be built in Carmelite Street, Aberdeen, for Mr. Thos. Ogilvie, manufacturer. Messrs. ELLIS & WILSON, Architects. Quantities by the Architects.  
Fordyce & Co, mason.  
Henderson, carpenter and joiner.  
Pirie, slater.  
Simpson & Rae, plasterer.  
Garvie & Sons, painter and glazier.  
Matthews, plumber and gasfitter.  
Heating Apparatus and Hydraulic Lift not yet estimated for.

## BROMLEY.

For a Detached Residence at South Hill Park, Bromley, Kent. Mr. ST. PIERRE HARRIS, Architect. Messrs. Baxter, Payne & Lepper, Surveyors.

Payne	£2,200 0 0
Arnand & Son	1,898 0 0
Crossley	1,750 0 0



## LEEDS.

For Painting Lodges at Burmantofts Cemetery, Leeds.  
Mr. THOMAS HEWSON, Borough Engineer, Town Hall,  
Leeds.

PEARSON (accepted).

## LONDON.

For Supply of 500 yards of broken Guernsey Granite, for  
the vestry of St. George-the-Martyr.

Beavers, Borough, 16s.

BUTTY, Bromley-by-Bow, 15s. 4d. per cubic yard (accepted).

For Erection of Drying Shed for Messrs. Oastler, Palmer  
& Co.

Little . . . . .	£1,320 0 0
J. & J. Greenwood . . . . .	1,135 0 0
Wells . . . . .	1,133 0 0
TARRANT & SON (accepted) . . . . .	1,095 0 0

For Erection of New Stabling, &c., for Thirty-three  
Horses, at Stockwell Road, Brixton, for the London  
Southern Tramways Company

Evans . . . . .	£810 5 0
Jackson & Todd . . . . .	761 0 0
Conlthard . . . . .	745 0 0
Allard . . . . .	732 9 6
Holliday & Greenwood . . . . .	688 13 9

## NORTH CHEAM.

For Alterations and Additions at Allerton House, North  
Cheam, for Mr. Charles Poll.

POWELL, Worcester Road (accepted) . . £220 0 0

## ORPINGTON.

For Repairs to The Laurels, Orpington, for Dr. Shannon.  
Mr. ST. PIERRE HARRIS, Surveyor, &c.

TAYLOR, Anglesea Road (accepted).

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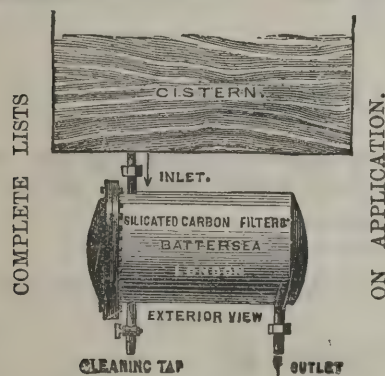
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Salesbury, St. Mary Bourne . . . . .	70 0 0
Batsford, St. Mary Bourne . . . . .	66 13 2
Broad, St. Mary Bourne . . . . .	64 10 0
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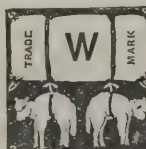
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Beadle Bros., Erith . . . . .	979 0 0
Cowdery & Sons, Newent . . . . .	973 4 4
Smith, Newcastle-on-Tyne . . . . .	923 0 4
Steward, Southend . . . . .	915 2 2
J. W. & J. NEAVE, Stratford (accepted) . . . . .	887 0 0
Williams, Wimbledon . . . . .	881 11 0
Armstrong, Chiswick, W. . . . .	851 6 5
Potter, Lower Clapton . . . . .	819 14 7
Engineer's Estimate . . . . .	850 0 0

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Dearle . . . . .	2,645 0 8

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# INDEX.

## Archæology:—

28, 216, 248, 261, 363, 382, 398, 410

## Articles:—

Admiralty and War Offices Competition, 174, 301  
Aix-la-Chapelle Cathedral, 26  
Aix-les-Bains, Mosaic Work, 226  
Anagni, 57  
Ancient Art Theories, 387  
Anglo-Saxon Sword, 321  
Apulia, Norman Buildings in, 324  
Arab Art in Egypt, 228  
Archæological and Topographical Books, 103  
ARCHITECTS, ROYAL INSTITUTE OF BRITISH—  
English Architecture and Monuments of the 16th and 17th Centuries, 392  
Fittings of Buildings for Applied Science Instruction, 323, 357  
President's Address, 289  
ARCHITECTURAL ASSOCIATION—  
Inaugural Address, 271  
Law Business of Architects, 342  
Papers, 375  
President's Address, 307  
Prizes, 271  
Architecture of Ledbury Church, 20  
Art and Democracy, 318  
—Education in England, 220  
—Gallery, Manchester, 104, 115, 145  
—in Relation to Time, Place, and Race, 368  
—in Towns, Mr. Ruskin on, 70  
—School for Blackburn, 38  
—Mr. Herkomer's, 128, 344  
—Study of, 402  
—Studies, Mr. Val Prinsep on, 387  
—Teaching, English and Foreign, 110  
—in France, 96  
—Mr. Herkomer on, 283  
Artisans' Dwellings, 327, 338, 360, 372, 389, 406  
—in Ireland, 303, 360  
—Act, 161  
Artists' Benevolent Fund, 25  
Ashburnham Manuscripts, 65, 103  
Ashestiel, Mr. Ruskin on, 321  
Asphalte Roofs, 56  
Assos, Excavations at, 407

Balfour Memorial Cross, 207  
Ball-room at Sandringham, 300  
Bavarian Industrial Art Schools, 164  
Belt v. Lawes, 386  
Ben Nevis Observatory, 177  
Bethnal Green Museum, 111  
Birley Memorials, Manchester, 406  
Birmingham Architectural Association, 20, 70, 181, 301  
—Free Library, 39  
—Master Builders' Association, 287  
—Midland Arts Club, 362  
Blackburn, Art School for, 38  
Blenheim Mantegna, 275  
Books, Archæological and Topographical, 103  
Borough English, 105  
Boroughbridge, Roman Camp, 320  
Bradford Society of Architects, 313  
Bristol and Clifton Junior Architects' Society, 35  
—Channel Observatory, 161  
—University College, 346  
British Association, 67

## Articles—continued.

British Museum, Print Room, 87, 102  
Brown, Mr. Ford Madox, 160  
—on Fine Art, 355  
Brown, Mr. Rawdon, 165  
Browne, the late Hablot K., 269  
Browning's, Mr., "Apollo and Dryope," 319  
Bruges, Venice of the North, 178  
Buckfast Abbey, 359  
Building Case in Australia, 153  
—in Glasgow, 223  
—in New York, 148  
—Materials, Irish, 275  
—Regulations for Glasgow, 12  
—Trades Exhibition, Bristol, 384  
Buildings of Bari, 380  
Bunney, the late Mr., 129  
Burnt and Raw Siena, 246

Cairo, Protection of Monuments, 66  
Calcutta Exhibition, 82, 336  
Canterbury, Memorial Altar, St. Augustine's, 6  
Capua, Church of St. Michael, 274  
Carlisle Cathedral, 127  
—Grammar School, 196  
Cartoons of Tenniel, 182  
Casamicciola, Rebuilding of, 239  
Cavendish Memorial, 83  
Ceilings, 197, 211, 396  
—Fire-Resisting, 247  
Cement Works Regulations, 135  
Chamberlain, the late J. H., 254  
Channel Railway Bridge, Proposed, 20  
—Tunnel, 23  
Château de Chambord, 131  
Chelsea Infirmary, 161  
Chesneau, M., on Mr. Madox Brown, 160  
Chester Cathedral, 268  
Church Bells, 128  
—Restoration, 285  
—Losses from, 80  
—Northamptonshire, 395  
Churches in Somerset, Type of, 133  
Clock at the Law Courts, 394  
Colour Harmony, 189  
Competition, Admiralty and War Offices, 174, 301  
—Hospital, Heaton, 173  
—Municipal Buildings, Nottingham, 101  
—Museum and Library, Dublin, 95  
—Town Hall, Hawick, 134, 180  
—Trades Hall, Glasgow, 160  
Competitions, 238  
Construction, Lord Napier of Magdala on, 403  
—in Iron, 211  
—of Hospitals, 88  
—of Houses from a Sanitary Point of View, 210  
Contractors' Grievances, 105  
Corinth Canal, 198  
Corn Exchange, Ipswich, 88  
Cornelius, Peter, 147  
Country Mansions, Electric Lighting for, 408  
Crosswell and Seighford Churches, 82  
Dallington Church, 388  
Designs, Registration of, 129

## Articles—continued.

Devizes Castle, 11  
Dewsbury Infirmary, 73  
Dilke, Sir Charles, on Science and Art, 372  
Donatello at Santo at Padua, 53  
Dublin, Artisans' Dwellings, 360  
—Museum and Library Competition, 95  
Dundee University College, 229, 241  
Dunfermline Fine Art Exhibition, 358  
—High School, 362  
Duomo at Florence, 380  
Dwellings of the Poor, 292  
Early Buildings in Sussex and Surrey, 116  
Eastbourne, Princess Alice Hospital, 11  
—Theatre, 21  
Eddystone Lighthouse, 358  
Edinburgh Architectural Association, 9, 326, 379, 405  
—Lyon Court, 118  
—in the Eighteenth Century, 151  
—Museum of Science and Art, 131  
—Old, 312  
—Public Improvements, 35  
—University Buildings, 261  
Education, Industrial, 194, 243  
Egypt, Arabian Art in, 228  
—Explorations in, 10  
Egyptian Antiquities, 66, 197  
—in Rome, 12  
Electric Lighting Act, 55  
—at South Kensington, 25, 99  
—for Country Mansions, 408  
Engineering Progress, 311  
English and Foreign Art Teaching, 110  
—Art Education, 229  
—School of Impressionists, 179  
Ephesus, Excavations at, 73  
Examination Papers in Architecture, 303  
Exotic Art, 258

Façade of Old Burlington House, 165  
Fine Arts, Mr. Madox Brown on, 355  
Fire Resisting Ceiling, 247  
Florence, Duomo, 380  
Forth Bridge, 104, 269, 339  
Forestry Exhibition, International, 275  
French Academy of Fine Arts in Rome, 196  
—Art Exhibition, Glasgow, 315  
Future of Ornament, 144

Gavin, R.S.A., the late Mr. Robert, 226  
German National Monument, 206  
Glasgow Archæological Society, 199, 346, 408  
—Architectural Association, 405  
—Building in, 223  
—Regulations, 12  
—French Art Exhibition, 318  
—Institute of Architects, 237  
—Municipal Buildings, 25, 228  
—Old University College, 276  
—Philosophical Society, 326  
—Trades Hall Competition, 160  
Gloucester Cathedral, 354  
Godwin, the late Mr. William, 136  
Grammar School, Carlisle, 196

## Articles—continued.

Greece, Explorations in, 41  
Greek Art, 394  
—Monastery, 359  
Hamburg, Public Works, 120  
Hawick Science and Art Classes, 205  
—Town Hall Competition, 134, 180  
Health Exhibition, 1884, International, 394  
Heathfield, Watt's Room, 286  
Heaton Hospital Competition, 173  
Herkomer, Mr., Art School of, 128, 344  
—on Art Teaching, 283  
High Ercall Hall and Church, 72  
History of South Kensington and Bethnal Green Museums, 111  
Hittite Antiquities, 212  
Holderness Parish Church, 166  
Hospital Construction, 88  
—of the Princess Alice, Eastbourne, 11  
—Norwich, 135  
Hotel, Northumberland Avenue, 51  
House Beautiful, the, 336  
—Construction, Sanitary Aspects of, 210  
—of Lords, Proposed Alterations, 69  
Huddersfield Fine Art Exhibition, 24

Illicit Commissions, 311, 319  
Impressionists, English School of, 179  
Incoherent Arts, 254  
Indian Survey, 58  
Industrial Art Schools, 225  
—Bavarian, 164  
—Arts, Venetian, 119  
—Education, 194, 243  
Infirmary, Chelsea, 161  
—Dewsbury, 73  
Inlay, Sienese, 229  
Institution of Civil Engineers, 395  
Ipswich Corn Exchange, 83  
Ireland, Labourers' Dwellings, 303, 360  
Irish Building Materials, 275  
—Eccelesiastical Antiquities, 54  
—Tramway Act, 396  
Iron Construction, 211  
Italian Sculpture at South Kensington, 222

Jerusalem, Discovery of an Ancient Church, 293  
Judges v. Artists on Art, 386

Kent Archæological Association, 99

Labourers' Dwellings, 327, 338, 360, 372, 389, 406  
—Ireland, 303, 360  
Lancashire and Cheshire Antiquarian Society, 115  
—Roman Remains, 227  
Lanercost Priory, Cumberland, 115  
Law Courts, the, 380  
—Clock, 394  
Ledbury Church, 20  
Leeds and Yorkshire Architectural Society, 274, 371  
Leighton, Sir Frederick, on Art in Relation to Time, Place, and Race, 368



**Articles—continued.**

Lerwick Town Hall, 72  
 Lessels, the late Mr. John, 302  
 Library of the Vatican, 236  
 Lichfield Cathedral, 345, 405  
 Lighting of Lighthouses, 407  
 Lightning Conductors, 396  
 Lincluden Abbey, 379  
 Local Boards and New Buildings, 305  
 London and Middlesex Archaeological Society, 83  
 — Dwellings, 209  
 — Public Works in, 326  
 — Theatres, 74  
 — University College, 10  
 Longleat, 10  
 Losses Through Church Restoration, 80  
 Low Ceilings, 197, 211, 396  
 Lyon Court, Edinburgh, 118

Macfarlane's Patterns, 302  
 Magdalene Bridge, Oxford, 6  
 Manchester Art Gallery, 104, 115, 145  
 — Birley Memorials, 406  
 — Building Exhibition, 11  
 — Owens College, 207  
 — Society of Architects, 292  
 Mantegna's "Samson and Delilah," 275  
 Mappin, the late Mr., Paintings of, 266  
 Measures of Length, English, 327  
 Memorial Altar, St. Augustine's, Canterbury, 6  
 — Cross, Balfour, 207  
 Mersey Tunnel, 195, 207  
 Metropolitan Improvements, 67  
 — Outer Circle Railway, 38  
 Mexico, 408  
 Midland Arts Club, Birmingham, 362  
 Model, Parisian, 260  
 Modern Art, Mr. G. Simonds on, 253  
 — Life in Modern Art, 284  
 Monastery, Greek, 359  
 Monument in Germany, National, 206  
 Monuments of Cairo, Protection of, 66  
 Mosaic Work at Aix-les-Bains, 226  
 Municipal Buildings Competition, Nottingham, 101  
 — Glasgow, 25  
 Museum of Science and Art, Edinburgh, 131  
 Museums of South Kensington and Bethnal Green, History of, 111

National Competition, Works at South Kensington, 23, 70  
 — Gallery, 257  
 — Portrait Gallery, 24, 339;  
 — for Scotland, 82  
 — Opera House, 393  
 — Prints and Drawings, 40  
 Neglected Pictures, 236  
 New York, Building in, 148  
 Newsham Collection, 403  
 Niagara, Railway Bridge over, 10  
 Norman Buildings in Apulia, 324  
 Norfolk and Norwich Hospital, 135  
 North Stoke Church, 74  
 Northampton, Theatre, 175  
 Northamptonshire, Church Restoration, 395  
 Northern Architectural Association, 227  
 Northumberland Avenue Hotel, 51  
 Nottingham Municipal Buildings Competition, 101

Old Burlington House, Façade of, 165  
 Open Spaces and Artisans' Dwellings, 360, 372, 389  
 Opera House, National, 393  
 Oriental Art at South Kensington, 393  
 Ornament, Future of, 144  
 Owens College, Manchester, 207  
 Owen Jones Prizes, 153  
 Oxford Colleges, 244

Page, the late Richard C., 163  
 Painter Etchers, 190  
 Paintings of the late Mr. Mappin, 266  
 Panama, 181  
 Paris Notes, 5, 19, 34, 51, 64, 79, 94, 109, 126, 143, 159, 178, 188, 205, 220, 235, 262, 266, 283, 299, 317, 334, 352, 367, 385, 401  
 Parisian Model, the, 260  
 Parliament House, Vienna, 359  
 Parry, Mr. Gambier, on the Study of Art, 402  
 Patents Act, 55, 129, 246, 261  
 Patrington Church, Holderness, 166

**Articles—continued.**

Pictures, Neglected, 236  
 — of Lord Overstone, 353  
 Pointing of Rubble Walls, 41  
 Princess Alice Hospital, 11  
 Prinsep, Mr. Val, on Art Studies, 387  
 Print Room, British Museum, 87, 102  
 Prints and Drawings, National Collection, 40  
 Public Works in London, 326  
 Punch, Mr. Ruskin on, 299

Railway Bridge over the Niagara, 10  
 — Channel, 20  
 — Metropolitan Outer Circle, 38  
 Raphael Exhibition, 177  
 Rebuilding of Casamiciola, 239  
 Registration of Designs, 129  
 Regulations for Cement Works, 135  
 Report of the Science and Art Department, 71  
 Restoration of Churches, 285  
 Revival of Venetian Industrial Arts, 119  
 Rome, Atrium Vestæ, 301  
 — Egyptian Antiquities in, 12  
 — French Academy of Fine Arts, 196  
 Roman Camp at Boroughbridge, 320  
 — House at Whitestaunton, 150  
 — Lancashire, 227  
 — Occupation of Britain, 245, 258, 267  
 — Road, Lancashire, 328  
 — Turret, 152  
 — Wall, Walltown Crags, 287  
 Roofs, Asphalte, 56  
 Rossetti's Influence on Art, 190  
 Royal Academy, 38  
 — Schools, 379  
 — Archaeological Institute, 10, 86  
 — Commission on Technical Education, 243  
 — Picture, 358  
 — Scottish Academy, 223, 320  
 Ruardean Church, Gloucestershire, 230  
 Rubble Walls, Pointing of, 41  
 Ruskin, Mr., on Art in Towns, 70  
 — Ashestiel, 321  
 — Punch, 299  
 — "Sincerity" in Landscape Art, 318

Sandringham, Ball-Room, 300  
 Sanitary Aspects of House Construction, 210  
 — Institute of Great Britain, 194, 276  
 — Precantions for London, 39  
 — Regulations in San Francisco, 121  
 Santa Fé, Mexico, 24  
 Schools of Industrial Art, 225  
 — Bavarian, 164  
 — Royal Academy, 379  
 Science and Art Department Prizes, 54  
 — Report, 71  
 — Lord Reay on, 205  
 Scotland, National Portrait Gallery for, 52  
 Scottish Royal Academy, 223, 320  
 — Society of Antiquaries, 378  
 Sculpture at South Kensington, 222  
 — Uses of, 345  
 Shakespeare and Warwickshire, 57  
 Shapira Manuscripts, 118  
 Shrewsbury Shirehall, 25  
 Sieneese Inlaying, 229  
 Smith, the late Dr. John, 119  
 Smoke Abatement, 40, 213  
 Social Science Association, 53  
 Society of Arts, 131, 286  
 — Engineers, 294  
 Somerset Type of Church, 133  
 South Kensington, Electric Light at, 25, 99  
 — Italian Sculpture, 222  
 — National Competition Drawings, 23, 70  
 — Oriental Art at, 393  
 South Wales University College, 275  
 St. Albans Cathedral, 191  
 St. Michael's Church, Capua, 274  
 St. Paul's, Wellington Monument, 72, 81, 104, 113  
 Stockport Art Exhibition, 160  
 Street Pavements, 228  
 Study of Art, 402  
 Sunderland, Victoria Hall Disaster, 11, 89  
 Survey of India, 58  
 Sussex and Surrey, Early Buildings in, 116

**Articles—continued.**

Tapestry at the Zurich Exhibition, 160  
 Taplow, Viking's Tomb, 284, 325  
 Technical Education, Royal Commission, 243  
 Tenniel and his Cartoons, 182  
 Thames Communications, 39  
 Theatre at Eastbourne, 21  
 — Northampton, 175  
 Theatres in London, 74  
 Theories on Art, Ancient, 387  
 Time-sheets in the Ordnance Works, 243  
 Town Hall Competition, Hawick, 134, 180  
 — Lerwick, 72  
 Trades Hall Competition, Glasgow, 160  
 Tramway Act, Irish, 396  
 Tripp, the late C. N., 152  
 Truth and Illicit Commissions, 311  
 Turner and the Liber Studiorum, 302  
 Turnery Exhibition, 87  
 University Buildings, Edinburgh, 261  
 — College, Bristol, 346  
 — Dundee, 229, 241  
 — Glasgow, Old, 276  
 — London, 10  
 — South Wales, 275  
 Uses of Sculpture, 345

Vatican Library, 236  
 Venice of the North, 178  
 — San Toma, 87  
 Venetian Industrial Arts, Revival of, 119  
 — Well Heads, 267  
 Victor Emanuel Memorial, 237, 355  
 Victoria Hall Disaster, Sunderland, 11, 89  
 Vienna Parliament House, 359  
 Viking's Tomb at Taplow, 284, 325  
 War and Admiralty Offices, Proposed, 118, 174, 301  
 Warwickshire, Shakespere in, 57  
 Watt's Room at Heathfield, 286  
 Wedgwood Institute, 312  
 Wellington Monument in St. Paul's, 72, 81, 104, 113  
 Whitestaunton, Roman House, 150  
 Winckelmann, 227  
 Wire-gauge Legal Standard, New, 152  
 Worcester Architectural Society, 7

Zurich Exhibition, Tapestry at, 160

**Art Workmanship :—**

14, 27, 43, 106, 168, 398

**Church Building and Restoration :—**

27, 43, 60, 76, 90, 106, 122, 137, 153, 167, 183, 199, 215, 231, 247, 261, 278, 295, 313, 329, 347, 364, 382, 397, 409

**Correspondence :—**

Architectural Association Hat and Coat Scramble, 277  
 Asphalte and Concrete Flats, Watson v. Langmead and Way, 59  
 Blomfield, Mr., and Sir Edmund Beckett, 294  
 — Scott, and Street, Messrs., 328, 347, 362, 381, 397  
 Christ Church Cathedral, Dublin, and Mr. Street, 328, 347, 362, 381, 397  
 Dublin Museum Competition, 276  
 Exhibition of Works in Wood, 276  
 Extras in Contracts, 397  
 Fireproof Floors, 13  
 Goldsmiths' Company's Prizes, 13  
 Hawick Town Hall, 166  
 Historical Chairs, 313  
 Housing of the Poor, 408  
 Iron Curtain at the Edinburgh Theatre, 167  
 London Atmosphere, 294

**Correspondence—continued.**

Mission Chapels, 363  
 Non-Poisonous Paints and Driers, 231  
 Page Memorial, 313  
 Plain Speaking, 313, 329  
 Reform in Modern Costume, 13  
 St. Paul's Cathedral, 75  
 Street, the late Mr. G. E., and Sir Edmund Beckett, 276  
 Trade Circulars, 121

**Engineering Works :—**

106, 137, 154, 167, 398

**General :—**

14, 28, 44, 60, 76, 90, 106, 122, 138, 154, 168, 184, 200, 216, 232, 248, 262, 278, 296, 314, 330, 348, 364, 382, 398, 410

**Leading Articles :—**

Admiralty and War Offices Competition, 201  
 Aesthetic Views of Dress, 107  
 Architects and "Agency," 249  
 Art Exhibition in Dundee, 218  
 — in Chaldaea and Assyria, 366  
 Artistic Testimony, Lord Coleridge on, 383  
 Autumn Exhibitions, 264  
 Bath in the Seventeenth Century, 384  
 Boldness of Construction, 139  
 Borough Surveyors, 125  
 Brussels Architectural Exhibition, 140, 166  
 Building Act, Decisions of Interest, 45  
 — Pressure on the London Poor, 315, 331  
 Change of Artistic Feeling, 297  
 Circular Notes from Franconia, 124, 142, 158, 172  
 Classic Art, M. Rydberg on, 219, 234  
 Cleveland and the Iron and Steel Institute, 186, 203  
 Comprehensive Artistic Training, 233  
 Curiosities of the Census, 333  
 Delight of the Eye, 185  
 Didier, M. Jules, 30  
 Dwellings of the Rich, 365  
 Engineering Exhibition, 4, 18, 32  
 English Schools, 202  
 Gallery of Mr. Denman Tripp, 17  
 Gentlemanlike Art, 1  
 Graphic and Analytic Statics, 265  
 Greek Sculpture, 400  
 Heth and Moab, 316  
 House Hunting, 169  
 Institute, Opening Meeting of, 279  
 Ironmaster's Hall, an, 203  
 Italian Painters and Italian Potentates, 298  
 Labourers and Artisans' Dwellings, 280  
 Ladylike Art, 15  
 Lefebvre, M. Jules, 46, 62  
 Liability of an Architect for Trespass, 3  
 Lionardo da Vinci, 2  
 London Street Communications, Projected, 251  
 Machine-made Art, 349  
 Mecklin Art Exhibition, 170  
 Open-air Space in Suburban Building, 91  
 Palais de Justice, Brussels, 250  
 Photographer's Right to Light, 50  
 Picture Galleries, 384  
 Roman Construction, 92  
 — Emperors in Marble, 234  
 Sanitary Progress, 217  
 Sanitation Societies and the Position of Architects, 29  
 Soane Museum, 61  
 St. Paul's Cathedral, 47, 48  
 Studies of some London Churches, 16, 31, 48, 63, 78, 93  
 Tall Building, 155  
 Temple of Diana at Ephesus, 281  
 Troja, Dr. Schliemann's, 332, 351  
 Two Palaces of Justice, 263  
 Ugliness of Towns, 77  
 Warton, Thomas, 108  
 Water-Colour Society, 350  
 Wellington Statue, 123  
 Year 1883, 399



**Legal:—****SUPREME COURT OF JUDICATURE.—****COURT OF APPEAL:—**

- Parker v. The First Avenue Hotel Company, Limited, Ancient Lights, 43  
 Russell v. Watts, Light and Air Case, 409

**HIGH COURT OF JUSTICE:—**

- Gard v. Commissioners of Sewers, Compulsory Purchase, 75  
 Miller v. Gardner, Employers' Liability Act, 295  
 Patent Silvering Company v. Padbury, Ware & Burman, Light and Air, 26  
 Sandgate Local Board of Health v. Leney, Injunction against Building, 75  
 Turney v. Hatton and Another, Light and Air Case, 295  
 Young & Co. v. Bacon, Holborn Statue, 89

**VARIOUS:—**

- Anderson & Brown v. J. B. Howard, New Lyceum Theatre, Edinburgh, 277, 381  
 Australian Building Case, 153  
 Ball v. Hollingworth & Clarke, Employers' Liability Act, 121  
 Callan v. Segrave, Builder's Claim, 314  
 Mooney v. West and Another, Accident at St. Patrick's Cathedral, Dublin, 329  
 Defective Building, 13  
 Hems v. Gaye, Payment of Work, 182  
 Hughes v. Porter and Another, Architect's Fees, 13  
 Snell v. Carnell, Architect's Fees, 348  
 Welsh v. Evans, Payment of Work, 214

**New Buildings:—**

- 27, 89, 137, 154, 183, 216, 232, 248, 296, 313, 330, 348, 364, 382

**Notes and Comments:—**

- Aberdeen Lord Provostship, 240  
 Alterations at the Louvre, 114  
 Ancient Stone Inscriptions, 404  
 Angle of Forty-five Degrees, 36  
 Antique Terra-Cottas, 114  
 Archaeological Discoveries, 130  
 Architects' Certificates, 68  
 Architecture and Costume at the Theatre, 356  
 Architectural Association, 240  
 Sketch Exhibition, 390  
 Art Culture, 208  
 Galleries and Museums, 224  
 Wood-Carving Schools, 224  
 Artisans as Students of Science, 84  
 Artistic Rip Van Winkle, 356, 390  
 Ashburnham Manuscripts, 68  
 Barle Bridge, 130  
 Barn at Great Coxwell, 8  
 Ben Nevis Observatory, 240  
 Bewick, 130  
 Birmingham and Midland Institute, 146  
 Master Builders, 288  
 Black and White Exhibition, 224  
 Book Illustration by Woodcuts, 288  
 Brisbane Town Hall Competition, 114  
 British Archaeological Association, 52

**Notes and Comments—continued.**

- Brussels Palais de Justice, 240  
 Buncleugh Memorial for Hawick, 176  
 Building Amenities, 36  
 Line in Streets, 162  
 Trade in Edinburgh, 270  
 Burning of a Lunatic Asylum, 98  
 Chamberlain, the late J. H., 256, 270, 288  
 Charing Cross Candelabra, 208  
 Chaucer and Shakespere at Kenilworth, 22  
 Chelsea Vestry Hall, 176  
 Chepstow Bridge, 322  
 Cherry-tree Wood Furniture, 114  
 Chester Cathedral Restoration, 98  
 Chichester Cathedral Spire, 404  
 Christmas Cards, 322, 404  
 Church Building in Lambeth, 306  
 City of Bath Roman Bath, 98  
 Cole, the late George, 162  
 Collier, the late John Payne, 176  
 Congress of American Architects, 176  
 Continental Art Teaching, 146  
 Control of Plumbers, 84  
 Corrie v. Reddin, 8  
 Council of the Institute of Architects, 404  
 Crocodile Leather Paper, 36  
 Decoration by Mr. Marks, R.A., 390  
 Defective Construction, 8  
 Diaries, 404  
 Disparagement of Architects, 224  
 Dismissing a Clerk of Works, 340  
 Dorchester House, 98  
 Douai Technical School, 68  
 Dover Town Hall, 114  
 Doyle, the late Richard, 374  
 Drawings of Albert Dürer, 340  
 Dublin Institute of Architects, 256  
 Dublin Museum Competition, 52, 84, 306, 322, 340  
 Dundee University College, 176  
 Duke of Bedford in Court, 36  
 Duties of a Town Surveyor, 356  
 Earls Barton Tower, 22  
 Edinburgh Architectural Association, 288  
 Castle, 390  
 Street Tramways, 374  
 Egyptian Inscription, 52  
 Electric Lighting, 36, 340  
 Conductors, 356  
 Engineers' Architecture in India, 68  
 Equestrian Statue at Blackfriars, 374  
 Examination Papers, 322  
 Exhibition at Humphreys Hall, 22  
 Exits from Public Buildings, 224  
 Theatres, 22  
 Failure of Metal Columns, 322  
 Fire-resisting Materials, 36  
 Fisheries Exhibition, 270  
 Flats in Spanish Towns, 98  
 Forth Bridge, 340  
 German National Monument, 208  
 Glasgow Art Union, 146  
 Old University Buildings, 346  
 Glasnevin Botanic Gardens, 84  
 Glass Pipes, 130  
 Gloucester Archaeological Society, 36  
 Graphic Arts Commission, 68  
 Determination of Strains, 192  
 Great George Street Improvement, 68  
 Hawick Town Hall Competition, 130, 176  
 History of Yorkshire, 98  
 Historic Well, 208  
 Hoardings, 356  
 Hospital Construction, 146  
 Illicit Commissions, 306  
 Indian Art at South Kensington, 8  
 Curatorship of Monuments, 98

**Notes and Comments—continued.**

- Institute By-laws, 390  
 International Health Exhibition, 356  
 Jardin des Plantes, 322  
 Jerry Builders, 162  
 Jordan, Professor, 256  
 Kent Archaeological Society, 22  
 Labourers' Dwellings, 356, 374, 390  
 in Paris, 404  
 Law Courts, Completion of, 374  
 Leaseholders' v. Proprietors' Rights, 306  
 Lectures on Greek Art, 192  
 Leicester Town Museum, 404  
 Lesueur, the late, 404  
 Light and Air Case, 22  
 Lighting of Life Schools, 84  
 Liverpool Cathedral Site, 240, 306  
 Local Archaeology, 340  
 London Heirlooms, 256  
 London University College, 192  
 Manchester Art Gallery, 146  
 Meeting of Master Builders, 68  
 Minneapolis, 390  
 Museum for North Wales, 322  
 National Colour of Ireland, 192  
 Gallery for Rome, 114  
 New Danger in Bricks, 340  
 New York, Surveyors' Clerks, 84  
 North Wales Slate Trade, 322  
 Nottingham Municipal Buildings, 52  
 O'Connell Monument, 52  
 Odilenberg Church, 176  
 Old Halls of Lancashire, 208  
 Masters at Edinburgh, 8  
 Saxon Stones, 22  
 Outfall Sewers and Landed Property, 240  
 Peterborough Cathedral, 283  
 Pictures at Manchester, 256  
 Poole, the late G. A., 208  
 Progress of the Renaissance, 270  
 Public Improvements in Ireland, 208  
 Works in Paris, 224  
 Question of Lateral Support, 298  
 Railway Communication in London, 322  
 Railways in Japan, 176  
 Raphael Drawings, 162  
 Rebuilding in Ischia, 162  
 Restoration, 84  
 Reid, Mr. G. W., 8, 374  
 the late Charles, 192  
 Richman, the late Alfred, 162  
 Royal Archaeological Institute, 22  
 Sanitary Exhibition Awards, 208  
 Institute, 270  
 Matters in New York, 114  
 Sanitation of London Baths, 270  
 Scandinavian Industrial Exhibition, 98  
 Scottish Water-Colour Society, 240  
 Sculptured Stones of Scotland, 224  
 Separate Estates, 52  
 Shakespere Documents, 356  
 Shrewsbury Shirehall, 68  
 Siemens, the late Sir William, 322  
 Smith, Mr. Smalman, 146  
 Smith, the late Pountney, 288  
 Smoke Abatement Institution, 22, 36  
 Smyrna Carpets, 146  
 Social Science Congress, 146  
 Spier Memorial at Beith, 270  
 Spottiswoode, the late W., 8  
 Statistics of Art Publications, 68  
 Steel Rails, 192  
 Study of Pictures, 146  
 Testing Weights and Measures, 322  
 Thames Communications, 404  
 Torquay, 98  
 Truro Cathedral, 340  
 Unemployed in Ireland, the, 288  
 Unsanitary Dwellings, 130  
 Valuation of Property, 52  
 Walkley Museum at Sheffield, 192, 270

**Notes and Comments—continued.**

- Water Supply in Richmond, 114  
 What is an Elevation? 306  
 White Paints, 208  
 Working of Canals, 224  
 Workmen's Huts at Panama, 68  
 Writings of Mr. Ruskin, 130

**Reviews:—**

- Accented Five-figure Logarithms, of Numbers from 1 to 99,999, without Differences. Lewis D'A. Jackson, 136  
 Architectural Designs of William Burges, A.R.A. R. P. Pullan, F.R.I.B.A., 166  
 Architectural History of the City of Rome, based on J. H. Parker's "Archæology of Rome" for the Use of Students. Arthur Shadwell, M.A., 92  
 Bathes of Bathes' Ayde in the Reign of Charles II. C. E. Davis, F.S.A., 384  
 Bibliographer: Journal of Book Lore. Vol. III., 27  
 Estimating a Method of Pricing Builders' Quantities for Competitive Work, by a Practical Estimator, 42  
 Graphic and Analytic Statics in Theory and Comparison. R. H. Graham, C.E., 235  
 Heth and Moab. Explorations in Syria in 1881 and 1882. Claude Regnier Conder, R.E., 316  
 History of Art in Chaldea and Assyria. Georges Perrot and Charles Chipiez. Translated by Water Armstrong, B.A., 366  
 History of Greek Sculpture under Pheidias and his Successors, Vol. II. A. S. Murray, 400  
 Hospital Construction and Management. F. J. Mouatt, M.D., F.R.C.S., and H. Saxon Snell, F.R.I.B.A., Part I., 42  
 Letts' Popular Atlas, 26  
 Memorials of Christchurch, Twynham, Hants. By the late Mackenzie E. C. Walcott, B.D., F.S.A., Third Edition, Revised by B. Edmund Ferrey, F.S.A., 42  
 Metropolitan Building Acts, 1855 to 1882, with Appendices. W. Cunningham Glen and J. R. Cunningham Glen, 42  
 Modern Perspective: Treatise upon the Principles and Practice of Plane and Cylindrical Perspective. Professor W. B. Ware, 136  
 Municipal and Sanitary Engineer's Handbook. H. Percy Boulnois, C.E., 125  
 Practical Treatise on the Strength of Materials, including their Elasticity and Resistance to Impact. Thomas Box, 26  
 Saw Mills, their Arrangement and Management. M. Powis Bale, M.Inst. M.E., 166  
 Troja, Results of the Latest Researches and Discoveries on the Site of Homer's Troy. Dr. Henry Schliemann, 332, 351

**School Buildings:—**

- 44, 122, 138, 167, 199, 216, 232, 296, 314, 330, 348, 364, 397



## INDEX OF ILLUSTRATIONS.

\* \* THE LITHOGRAPHED ILLUSTRATIONS WILL BE FOUND OPPOSITE TO THE PAGES QUOTED.

- Aberdeen, Woodside Free Library, 271  
 Almshouses and Chapel, Turvey Beds., 391  
 Apotheosis of Homer, 9  
 Arab Officer, 131  
 Ardeley, Road Screen, St. Lawrence, 147  
 Aston Public Offices, 357  
 Asylum, near Henley-in-Arden, Private, 69  
 Bank, Design for, 147  
 Batley Cottage Hospital, 23  
 Bedford Park, Chiswick, Houses, 323  
 ——— Town and County Club, 405  
 Bedfordbury, Premises, 163  
 Binfield, Residence, 115  
 Birkenhead, Mission Chapel and Schools, Claughton, 69  
 ——— Town Hall, 357  
 Blackburn, St. Alban's Church, 177  
 Bolling Old Hall, near Bradford, 323  
 Boudoir Decoration, 147  
 Brussels Palace of Justice, 257  
 Burgess Hill, Houses, 375  
 Burton-on-Trent, St. Paul's Institute, 85  
 Canada, Residence in Winnipeg, 289  
 Carmarthen, Memorial Lych Gate, 357  
 Chambers in Broad Street, Reading, 271  
 Chapel and Almshouses, Turvey, Beds., 391  
 ——— Schools, Claughton, 69  
 ——— at Horbury, near Wakefield, Wesleyan, 289  
 ——— Mortuary, 357  
 ——— Newport, Mon., 241  
 ——— of St. Erasmus, Westminster Abbey, 375  
 Chartres Cathedral, South Transept, 37  
 Chelsea Hospital for Women, 9  
 Chimney, Hampton Court, 405  
 Chimney-piece, Crag-side, Northumberland, 9  
 ——— Newcastle-on-Tyne, 320  
 ——— Northampton, 53  
 ——— Sheffield, 375  
 Church, Edale, Derbyshire, Proposed, 241  
 ——— Frindesbury, Kent, 392  
 ——— All Saints, Ipswich, Design for, 99, 193, 307, 391, 405  
 ——— St. Madeleine, Troyes, 99  
 ——— Tarasp, English, 225  
 City of London School, 193  
 Continental Sketches, 163, 173, 341  
 Cottage Hospital, Batley, 23  
 Cottages, Norbiton Park Estate, Surrey, 69  
 Country Residence, 115  
 Cricklewood, House at, 271  
 Decoration for Boudoir, 147  
 Decorative Panels by M. Mazerolle, 289  
 Designs by the late R. C. Page, 357  
 Devon, Stoodleigh Court, 225  
 Doorway, Rievaulx Abbey, 53  
 Dover, Houses and Shops, St. Martin's Hill, 85  
 Dublin National Museum, 241  
 Dundee Advertiser Offices, 341  
 Edale, Derbyshire, Proposed Church, 241  
 Edinburgh, Mission Hall, Carrubbers Close, 307  
 ——— Waverley Hotel, 289  
 Entrance Front, Westwoodhay House, 131  
 Evesham, Sketches in, 85  
 Exchange, Royal, Roof, 341  
 Exeter, Premises in Bedford Street, 177  
 Fallowfield, Manchester, Holy Innocent Schools, 147  
 Felixstowe, Semi-Detached Houses, 131  
 Fenchurch Avenue, Offices in, 323  
 Fireplaces, Ivy Dale, Northampton, 53  
 Font and Cover, St. Mary's Church, Watford, 209  
 Founder's Tomb, St. Bartholomew the Great, 53  
 French Architecture, Sketches of, 163, 177  
 Frindesbury Church, Kent, 392  
 Gates to Park, Wrought-Iron, 163  
 Glasgow Municipal Buildings, Design for, 405  
 ——— Southern Hospital, Design for, 271  
 Hall, Nether Court, 177  
 Halt, A, 131  
 Hampton Court, Chimney, 405  
 Henley-in-Arden, Private Asylum, 69  
 Holmrook Hall, Cumberland, Inglenook, 307  
 Horbury, Wakefield, Chapel at, 289  
 Hospital for Women, Chelsea, 9  
 ——— Glasgow, Design for, 271  
 ——— St. Leonards-on-Sea, 131  
 ——— Stratford-on-Avon, Design for, 69  
 House, Burgess Hill, Sussex, 375  
 ——— Cricklewood, 271  
 ——— Highfield, Mottingham Park, Kent, 131  
 ——— Long Ditton, 69  
 ——— Oatlands Park, Weybridge, 23  
 ——— Ote Hall, Sussex, 23  
 ——— St. Albans, New House Park, 241  
 ——— Westoe, South Shields, 69  
 ——— Woodlands, Stoke Pogis, 241  
 Houses and Shops, Clay Pit Lane, Leeds, 147  
 ——— Newcastle-under-Lyme, 307  
 ——— St. Martin's Hill, Folkestone Road, Dover, 85  
 ——— Bedford Park, Chiswick, 323  
 ——— Harrington Gardens, South Kensington, 209  
 ——— Semi-detached, Eastward Ho Estate, Felixstowe, 131  
 Inglenook, Holmrook Hall, Cumberland, 307  
 Ipswich, Design for Church of All Saints, 99, 193, 307, 391, 405  
 Kent, Highfield House, Mottingham Park, 131  
 King's School, Peterborough, 323  
 Kirkstall Abbey, West Front, 99  
 Laon, Ornament from, 163, 177  
 Le Mans Cathedral, North Aisle of Choir, 37  
 Leeds, Houses and Shops, Clay Pit Lane, 147  
 ——— Premises, Woodhouse Lane, 99  
 Library Chimney-piece, Abbeyfield, Sheffield, 375  
 ——— Woodside, Aberdeen, 271  
 Life Model, Studies from, 115  
 Liverpool Zoological Gardens, 307  
 Long Ditton, House, 69  
 Lych Gate, 357  
 Mission Hall, Carrubbers Close, Edinburgh, 307  
 ——— Leeds, 391  
 ——— St. Margaret's, Twickenham, 391  
 ——— Trowbridge, 271  
 Mortuary Chapel, 357  
 Municipal Buildings, Glasgow, Design for, 405  
 Mural Paintings, Mediæval, 392  
 Museum, Dublin, 241  
 Nether Court, Hall, 177  
 Newcastle-on-Tyne, Fireplace, 320  
 Newcastle, Staffs., Houses and Shops, 307  
 Newport, Mon., Chapel, 241  
 Northampton, Fireplaces, Ivy Dale, 53  
 Nottingham, Schools, Alfreton Road, 85  
 Offices, No. 4 Fenchurch Avenue, 323  
 ——— of the Dundee Advertiser, 341  
 Old Fireplace, Newcastle-on-Tyne, 323  
 Ote Hall, Sussex, 23  
 Oxford Arms, Warwick Lane, 23  
 Page, the late R. C., Designs by, 357  
 Paintings, Mural, 392  
 Palais de Justice, Brussels, 257  
 Panels, Decorated, 289  
 Peel, Manchester, Schools, 209  
 Peterborough, King's School, 323  
 Picture Gallery, Crag-side, 9  
 Pontefract, Town Hall, 357  
 Premises, Bedford Street, Exeter, 177  
 ——— Bedfordbury, 163  
 ——— No. 396 Mile End Road, 37  
 ——— Truro, 375  
 ——— Wigmore Street, 225  
 ——— Woodhouse Lane, Leeds, 99  
 Prince of Saxe Coburg Tavern, Old Kent Road, 163  
 Public Offices, Aston, 357  
 ——— Wandsworth, 357  
 Quirini Lecturing in Venice, 23  
 Railway Inn, West Hoathley, 375  
 Reading, Broad Street Chambers, 271  
 Residence, Binfield, Berks, 115  
 ——— Country, 115  
 ——— Cricklewood, 271  
 ——— Westoe, South Shields, 69  
 ——— Winnipeg, Canada, 289  
 Rievaulx Abbey, Doorway, 53  
 Rochdale, Schools, 391  
 Road Screen, St. Lawrence, Ardeley, 147  
 Royal Exchange, E.C., Roof for Quadrangle, 341  
 Russell Chambers, Bury Street, Oxford Street, 53  
 School, City of London, 193  
 ——— Peterborough, King's, 323  
 Schools, Alfreton Road, Nottingham, 85  
 ——— and Mission Chapel, Claughton, Birkenhead, 69  
 ——— Cann Hall Lane, Wanstead, 85  
 ——— Holy Innocents, Fallowfield, near Manchester, 147  
 ——— Kea, Truro, 163  
 ——— Peel, near Manchester, 209  
 ——— Rochdale, 391  
 Shooting Box, Design for, 37  
 Sketches from the Continent, 341  
 Sketches of Evesham, 85  
 ——— French Architecture, 163, 177  
 South Kensington, Houses, Harrington Gardens, 209  
 ——— Wrexall, Vicarage, 271  
 St. Alban's Church, Blackburn, 177  
 ——— New House Park, 241  
 St. Erasmus' Chapel, Westminster Abbey, 375  
 St. Leonards-on-Sea, Hospital, 131  
 St. Mark's Church, Venice, 163  
 St. Paul's Cathedral, Segmental Arches, 53  
 ——— Institute, Burton-on-Trent, 85  
 Staircase Decoration, 69  
 ——— for House at Westerham, 307  
 Starved Monk's Tomb, Tewkesbury Abbey, 375  
 Stoke Pogis, Woodlands House, 241  
 Stoodleigh Court, Devon, 225  
 Stratford-on-Avon, Hospital, Design for, 69  
 Studies by M. Dupain, 193  
 ——— from the Living Model, 115  
 Tarasp, English Church, 225  
 Tavern, Old Kent Road, 163  
 Templemere, Oatlands Park, Weybridge, 23  
 Tewkesbury Abbey, Starved Monk's Tomb, 375  
 ——— Warwick Chapel, 9  
 Tomb of the Founder, St. Bartholomew the Great, Smithfield, 53  
 ——— Starved Monk, 375  
 Town Hall, Birkenhead, 357  
 ——— Newport, Mon., 147  
 ——— Pontefract, 357  
 Trowbridge, Mission Hall, 271  
 Troyes, Church of St. Madeleine, 99  
 Truro, Schools, 163  
 Turvey, Beds., Almshouses and Chapel, 391  
 Twickenham, St. Margaret's Mission Hall, 391  
 Venice, Quirini lecturing, 23  
 ——— St. Mark's Church, 163  
 Vicarage, South Wrexall, 271  
 Victor Emanuel Memorial, 37  
 Villa Residence, Westoe, South Shields, 69  
 Wakefield, Chapel at Horbury, 289  
 Wandsworth Public Offices, 357  
 Wanstead, Schools, Cann Hall Lane, 85  
 Warwick Chapel, Tewkesbury Abbey, 9  
 Watford, Font and Cover, St. Mary's Church, 209  
 Waverley Hotel, Edinburgh, 289  
 West Hoathley, Railway Inn, 375  
 Westerham, Staircase for House, 307  
 Westminster Abbey, Chapel of St. Erasmus, 375  
 Westoe, South Shields, Residence, 69  
 Westwoodhay House, Entrance Front, 131  
 Weybridge, Additions to Templemere, 23  
 Wigmore Street, Premises, 225  
 Winchester, View in, 115  
 Winnipeg, Canada, Residence, 289  
 Wrought-Iron Park Gates, Design for, 163  
 Yacht, Cuhona, 209  
 Zoological Gardens, Liverpool, 307





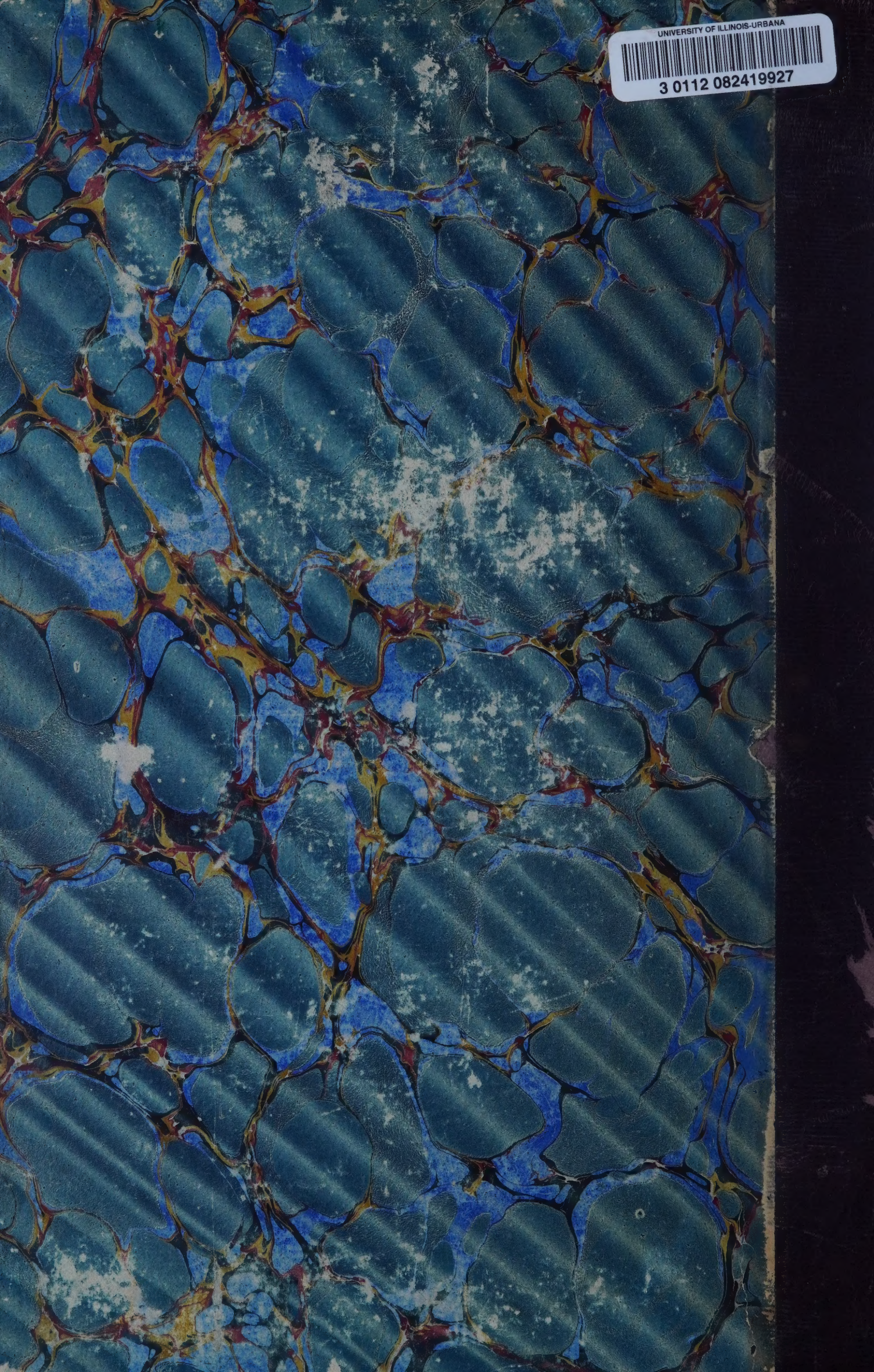












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